Report No. CETHA-BC-CR-89354

USATHAMA

U.S. Army Toxic and Hazardous Materials Agency

Task Order 2
Enhanced Preliminary Assessment

NEW ORLEANS MILITARY OCEAN TERMINAL NEW ORLEANS, LOUISIANA

Contract Number DAAA15-88-D-0007

December 1989



Prepared for

U.S. Army Toxic and Hazardous Materials Agency Aberdeen Proving Ground, Maryland 21010-5401

Prepared by



Roy F. Weston, Inc. | West Chester, Pennsylvania 19380 DISTRIBUTION STATEMENT A

Approved for public release; Distribution Unlimited

DTIC QUALITY INSPECTED 5

19950901 077



Report No. CETHA-BC-CR-89354

USATHAMA Task Order 2

ENHANCED PRELIMINARY ASSESSMENT

NEW ORLEANS MILITARY OCEAN TERMINAL NEW ORLEANS, LOUISIANA

Contract No. DAAA15-88-D-0007

Timothy Farrell Project Engineer

Lawrence J. Bove, P.E. Project Manager

Glenn M. Johnson, P.E Program Manager

December 1989

Prepared By:

Roy F. Weston, Inc. Weston Way West Chester, Pennsylvania 19380

SECONT CEASUREMENT OF THIS PAGE	REPORT DOCUM	ENTATION	PAGE		
		1b. RESTRICTIVE A			
1a. REPORT SECURITY CLASSIFICATION Unclassified		ID. RESIRICIIVE	CONHANAIN		
2a. SECURITY CLASSIFICATION AUTHORITY		3 DISTRIBUTION	AVAILABILITY OF	REPORT	
			_		
2b. DECLASSIFICATION / DOWNGRADING SCHEDU	LE	Distri	oution unl	imited.	
4. PERFORMING ORGANIZATION REPORT NUMBER	R(S)	5. MONITORING (ORGANIZATION RE	PORT NUMB	ER(S)
2281-09-02-0800					
6a. NAME OF PERFORMING ORGANIZATION	6b. OFFICE SYMBOL	7a. NAME OF MO	NITORING ORGAN	IZATION	
,	(If applicable)	U.S. Army	Toxic and	Hazard	lous
Roy F. Weston, Inc.		Materials			
6c. ADDRESS (City, State, and ZIP Code)		ATTIM - CETT	y, State, and ZIP C HA-BC-B		
1 Weston Way West Chester, Pa 19380		Aberdeen	Proving Gr	ound (Ed	lgewood Area)
west chester, ra 19300					
8a. NAME OF FUNDING/SPONSORING	8b. OFFICE SYMBOL		INSTRUMENT IDE		
ORGANIZATION USATHAMA	(If applicable)	DAAA-88-I	D-0007 Tas	r order	. 4
8c. ADDRESS (City, State, and ZIP Code)		10. SOURCE OF F	UNDING NUMBERS	;	
ATTN · CETHA-BC-B		PROGRAM	PROJECT NO.	TASK NO.	WORK UNIT
Aberdeen Proving Ground (Maryland 21010-5401	Edgewood Area)	ELEMENT NO.	INO.	140.	ACCESSION NO.
11. TITLE (Include Security Classification)					1
•		looma Willia	.	Monni:	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Preliminary Assessment Re	eport: New Orl	eans Mill	cary Ocean	rermir	laı
12. PERSONAL AUTHOR(S)					
13a. TYPE OF REPORT 13b. TIME CO			RT (Year, Month, D	Day) 15. PA	AGE COUNT
Final FROM 1	0/89 to <u>12/89</u>	1989, Dec	cember		
16. SUPPLEMENTARY NOTATION					
1					
17. COSATI CODES	18. SUBJECT TERMS (C		e if necessary and	identify by	block number)
FIELD GROUP SUB-GROUP	See attache	ea sneet.			
	1				
19. ABSTRACT (Continue on reverse if necessary	and identify by block n	umber)	v Orleans	Mili+~~	00035
A preliminary assessment to Terminal (New Orleans MOT)	was conducted). which is pl	at the Nev anned for	inclusion	in the	e Base
Closure Program. New Orleand Mississippi River and the	ans MOT is loc	ated at t	ne interse	ction c	or the
limits of New Orleans, Lou	isiana.	and a squesto.	"		
The facility can be divide	ed into two ma	jor activ	ities: war	ehousir	ng and ship-
ping and privately owned had the assignment of ship	vehicle shipme	ent prepar	ation. New	Oriear	is mor has
Orleans since 1919 althou	gh this activi	tv was in	terruptea	to an i	incertain ex-
tent from 1922 to 1942. No observed during the site	riait on 21 Oc	1+0h0x 100	u ar durin	a talla	w-iin intar-
views that would require	immediate acti	on. A geo	physical s	urvey i	s recommend-
transformers should be te	sted for poly	hlorinate	d biphenyl	s. Asbe	stos samplin
views that would require ed to confirm the presence transformers should be testis recommended for all butting and priorrail lines at	lidings. Soll nd near the ve	sampies s chicle was	nould be o h rack. T	he sedi	ments under
the berths should be samp	led. The obje	CCTAG OT	the sampir	ng is t	o detect
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT		21. ABSTRACT SE	CURITY CLASSIFIC	ATION	
ZUNCLASSIFIED/UNLIMITED SAME AS 22a. NAME OF RESPONSIBLE INDIVIDUAL	RPT. DTIC USERS		sillea (Include Area Code,) 22c. OFFIC	E SYMBOL
Pucty Fendik			461/3261		

DD FORM 1473, 84 MAR

83 APR edition may be used until exhausted.
All other editions are obsolete.

SECURITY CLASSIFICATION OF THIS PAGE

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE

18. Base Closure Program, New Orleans Military Ocean Terminal New Orleans Army Base, Gulf Outport, Naval Support Activity Environmentally Significant Operations



DISCLAIMER

This Enhanced Preliminary Assessment report is based primarily on the environmental conditions observed at the New Orleans Military Ocean Terminal, located in New Orleans, Louisiana, on 24 October 1989. Past site conditions and management practices were evaluated, based on readily available records and the recollections of people interviewed. Every effort was made, within the scope of the task, to interview all identified site personnel, especially those personnel with a historical perspective of site operations.

No environmental sampling was conducted as part of the assessment. The findings and recommendations for further action are based on WESTON's experience and technical judgment, as well as current regulatory agency requirements. Future regulations as well as any modifications to current statutes may affect the compliance status of this site.

WESTON does not warrant or guarantee that the property is suitable for any particular purpose or certify any areas of the property as "clean." A more thorough investigation, including intrusive sampling and analysis for specific hazardous materials, is recommended prior to reporting this property as excess.

			
Accesion	For		
NTIS (DTIC Unanno Justifica	FAB unced		
By Distribu	ition/		
A	/ailability	Codes	
Dist	Avail at Spec	nd / or cial	
A-1		·	***************************************



TABLE OF CONTENTS

Section		<u>Title</u>	Page
	DISCLAIMER		iii
	EXECUTIVE SU	MMARY	ES-1
1	INTRODUCTION	N	1-1
	1.1 Background 1.2 Objectives 1.3 Procedures 1.4 Report For	3	1-1 1-1 1-2 1-2
2	PROPERTY CHA	ARACTERIZATION	2-1
	2.2 Description 2.2.1 Ge	roperty Information n of Facilities eneral Property Description and History eneration and Disposal of Wastes	2-1 2-1 2-1 2-5
	2.3 Permitting 2.4 General En 2.4.1 De 2.4.2 Cl 2.4.3 Se 2.4.4 Se 2.4.5 Gr 2.4.6 Fl	g Status nvironmental Information emographics and Land Use	2-5 2-5 2-5 2-6 2-8 2-8 2-8 2-9 2-9
3	ENVIRONMENT	FALLY SIGNIFICANT OPERATIONS	3-1
	3.2 Undergrou 3.3 Potential U	ading Area ash Rack racks	3-1 3-1 3-3 3-3 3-3 3-4 3-4 3-4 3-5
4	HUMAN AND E	NVIRONMENTAL RECEPTORS	4-1
	4.1 Groundwar 4.2 Surface Wa 4.3 Air		4-1 4-1 4-1



TABLE OF CONTENTS (continued)

Section		<u>Title</u>	Page
	4.4	Soils	4-1
	4.5	Other Hazards	4-2
		4.5.1 Fire and Explosions	$\begin{array}{c} 4-2 \\ 4-2 \end{array}$
		4.5.2 Direct Contact	4-4
5	CON	CLUSIONS AND RECOMMENDATIONS	5-1
	5.1	Summary of Findings	5-1
		5.1.1 Underground Storage Tanks	5-1
		5.1.2 Transformers	5-1
		5.1.3 Fuel Unloading Area	5-1
		5.1.4 Vehicle Wash Rack	5-2
		5.1.5 Railroad Tracks	5-2
		5.1.6 Berths 1-5	· 5 -2
		5.1.7 Asbestos	5-2
	5.2	Recommendations for Further Action	5-2
	· · ·	5.2.1 Underground Storage Tanks	5-2
		5.2.2 Transformers	$\overline{5}$ - $\overline{5}$
		5.2.3 Fuel Unloading Area	$\tilde{5}$ - $\tilde{5}$
		5.2.4 Vehicle Wash Rack	5-5
		5.2.5 Railroad Tracks	5-5
		5.2.6 Berths 1-5	5-5
		5.2.7 Asbestos	5-5
6	нчяя	RENCES	6-1
Ū			
	6.1	Direct Interviews	6-1
	6.2	Telephone Interviews	6-1
	6.3	Reports and Other Documents	6-1
7	PHOT	TOGRAPHS	7-1
	APPE	NDIX A - SUMMARY OF OPERATIONS (EXCERPTS)	
	APPE	NDIX B - NOTIFICATION OF HAZARDOUS WASTE ACTIVITY	
	APPE	NDIX C - REGISTRATION FOR UNDERGROUND STOR TANKS NEW ORLEANS MOT	AGE
	APPE	NDIX D - CERCLIS LISTING FOR NEW ORLEANS	
	APPE	NDIX E - REGISTERED WELLS WITHIN ORLEANS PARISH (EXCERPTS)	
	APPE	NDIX F - SPECIES SURVEY NEW ORLEANS	



LIST OF TABLES

<u>Table No.</u>	<u>Title</u>	Page
ES-1	ESOs Identified at New Orleans MOT and Recommendations for Further Action	ES-5
2-1	Property Information Summary New Orleans MOT	2-3
5-1	ESOs Identified at New Orleans MOT and Recommendations for Further Action	5-3



LIST OF FIGURES

<u>Figure No.</u>	<u>Title</u>	Page
ES-1	Composite	ES-4
2-1	Property Location	2-2
2-2	Site Plan With Land Use	2-4
2-3	Wind Rose	2-7
3-1	Environmentally Significant Operations	3-2
5-1	Recommended Sampling Locations	5-4



EXECUTIVE SUMMARY

BACKGROUND AND OBJECTIVES

This Enhanced Preliminary Assessment (PA) report has been prepared by Roy F. Weston, Inc. (WESTON) at the request of the U.S. Army Toxic and Hazardous Materials Agency (USATHAMA) pursuant to Contract DAAA15-88-D-0007, Task Order 2. The purpose of the PA report is to present WESTON's findings concerning the environmental conditions at the New Orleans Military Ocean Terminal (New Orleans (MOT) in New Orleans, Louisiana, and to provide recommendations for further action.

The objectives of the PA were to:

- Identify and characterize environmentally significant operations (ESOs) associated with the historical and current use of the New Orleans MOT property.
- Identify and characterize possible impacts of the ESOs on the surrounding environment.
- Identify additional environmental actions, if any, that should be implemented for the ESOs identified.

Information contained in this enhanced PA report was obtained through:

- Visual inspection of the facility.
- Review of available Army documentation.
- Review of related regulatory agency files at the state and federal levels.
- Interviews with current employees at New Orleans MOT.

GENERAL PROPERTY DESCRIPTION

New Orleans MOT is located at the intersection of the Mississippi River and the Inner Harbor Navigational Canal. Construction of the New Orleans MOT was completed in 1919. In 1922, fire destroyed the wooden wharves and the wharfhouse. Reconstruction of the facility was completed in 1942. New Orleans MOT is currently the responsibility of the Army with the U.S. Maritime Administration and the Board of Commissioners, Port of New Orleans, the current tenants. New Orleans MOT is located adjacent to a Naval Support Activity (NSA).

The facility can be divided into two major activities: warehousing and shipping and privately owned vehicle (POV) shipment preparation. New

WESTERN.

Orleans MOT has had the assignment to ship materials through New Orleans since 1919, although this activity was interrupted to an uncertain extent from 1922 to 1942. Currently a wide range of equipment and material is processed through this facility including:

Military equipment

Privately owned vehicles.

• Supplies for Post Exchanges (PXs).

Ordnance.

Chemicals and Compressed Gases.

These duties and materials handled have not changed significantly since World War II.

ESOs identified on the property include:

- Underground Storage Tanks (USTs). Three active, one inactive, three former, and three potential tanks were identified. The three former tanks were removed in 1982; one was found to be leaking. The extent of cleanup is unknown. Three tanks were subsequently installed as replacements. The active tanks store gasoline and diesel fuel for vehicles used onsite. Installation of monitoring wells around the $\mathbf{k}\mathbf{n}\mathbf{o}\mathbf{w}\mathbf{n}$ tanks is scheduled. Anv contamination from the former leaking tank will be discovered by the groundwater monitoring of these wells. Two potential tanks were identified as a fuel station. The pumps were removed in 1979, but the tanks are believed to have been left in place.
- Transformers. Nineteen transformers at six stations were identified. These units have not been tested for polychlorinated biphenyls (PCBs) and are the operational responsibility of the NSA. The transformers are in good condition and there is no visual evidence of spills in the past.
- <u>Fuel Unloading Area</u>. Gasoline is pumped out of privately-owned vehicles in preparation for shipment. This fuel is stored in an underground storage tank and subsequently reused within the facility.
- <u>Vehicle Wash Rack</u>. A concrete pad was reported to have been used for vehicle washing. The surrounding area is unpaved. Washwater would have seeped into the surrounding soil. There is no information regarding vehicle maintenance on this pad.
- Railroad Tracks. A large railyard formerly covered approximately 320,000 sq ft of the property. Many of the lines have been removed or paved over with asphalt. This area is a source of contamination from spills or petroleum, oil and lubricants (POL) and solvents from train activities during loading/unloading operations.
- Berths 1 to 5. These berths have been used since World War II for general storage and warehousing operations. The variety of



hazardous materials stored currently is quite extensive and includes munitions, compressed gases, corrosives, flammables, and oxidizers. The floor of the facility is concrete with holes drilled to allow discharge directly to the Mississippi River or fill sediment under the berth. The largest container present at the time of the survey was a 55-gal drum. Approximately 2,000 gal of hazardous material was surveyed.

• <u>Asbestos</u>. Transite siding was tentatively indentified on Buildings 623 and 624. This material is known to contain asbestos fibers. None of the buildings have been surveyed for asbestos.

The identified ESOs for New Orleans MOT are shown in Figure 3-1.

HUMAN AND ENVIRONMENTAL RECEPTORS

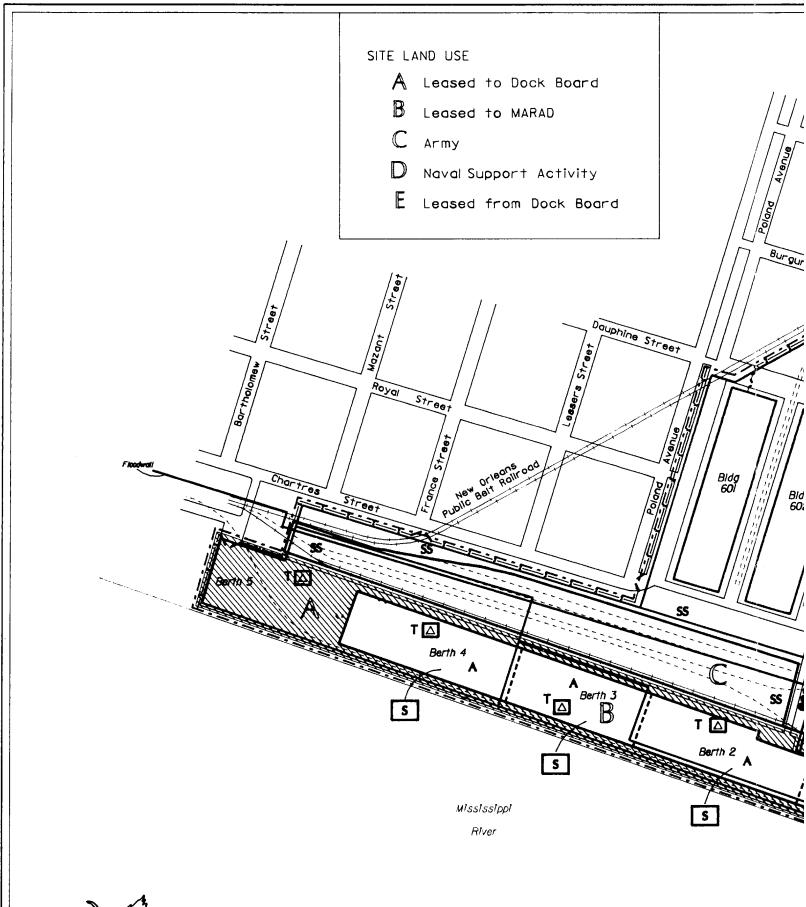
The area surrounding New Orleans MOT is heavily populated with commercial activities along the river. The property is located within a floodplain, although it is protected by a levee. There are wetlands within one mile of the facility. At least seven waterbird nesting colonies are found within this portion of the river.

The significant aquifers in this area range from brackish to saline. The shallow groundwater is less than 10 ft below the surface. All registered wells within 3 miles are drilled to a depth of 700 to 800 ft.

CONCLUSIONS AND RECOMMENDATIONS

No environmental conditions were observed on the property that appear to present an immediate, substantial threat to human health or the environment. The ESOs discussed in the report do have the potential to affect human health or the environment. The recommendations concerning each ESO follow and are summarized in Table ES-1. Recommended sampling locations are shown in Figure ES-1.

- <u>Underground Storage Tanks</u>. No further action is recommended for the identified tanks because monitoring wells are scheduled to be installed. The two potential tank locations should be investigated to ascertain their existence.
- Transformers. All transformers should be tested for PCBs.
- <u>Fuel Unloading Area</u>. The building's trench drains provide the most likely pathway for the migration of contaminants. The sewer sediments should be sampled and analyzed for total petroleum hydrocarbons (TPH).
- Vehicle Wash Rack. The surrounding soil should be sampled because washwater that may have contained oil and grease would have drained to the surrounding ground. The sample collected should be analyzed for TPH and RCRA metals.





Rampart Burgundy inner Harbor Bidg 602 Berth I

> NOTE: Possible asbestos-containing materials present in buildings

623, 624 and berths ! through 4.

U. S. Army **Base Closure Preliminary Assessment** New Orleans Military Ocean Terminal

New Orleans, LA - November 1969

Figure ES-1 **Property Information Composite**

Compiled in 1989 from various sources provided by the U.S. Army Toxic and Hazardous Materials Agency

Navigation Canal

RECOMMENDED SAMPLING METHODS

Transformer Oil

Surface Soil

Asbestos

Tank Verification

Sediment (Below Berths 1-4)

NOTE: Asbestos sampling is recommended for all buildings.

ENVIRONMENTALLY SIGNIFICANT OPERATIONS

- Potential Underground Storage Tank
- Underground Storage Tank
- Transformer
- Building 623-Vehicle Defueling
- Vehicle Wash Rack
- General Storage and Material Hauling
- Former Railroad
- Current Railroad



Table ES-1

ESOs Identified at New Orleans MOT and Recommendations for Further Action

ES0	Contaminants of Concern	Recommended Activity	Number of Samples	Location	Sample Type	Analysis
Underground Storage Tanks	Petroleum hydrocarbons	No further action	-	Next to Ramp 613		-
Underground Storage Tank	Petroleum hydrocarbons	No further action		In front of Building 623	I	
Potential Underground Storage Tank	Petroleum hydrocarbons	Site Investigation		Next to boat ramp	Tank verification	
Potential Underground Storage Tank	Unknown	Site Investigation		Behind Building 623	Tank verification	
Transformers	PCBs	Site Investigation	1/transformer	Each transformer	Transformer oil	PCBs
Fuel Unloading Area	Petroleum hydrocarbons	Site Investigation	_	Floor drain	Orain sediments	ТРН
Vehicle Wash Rack	Petroleum hydrocarbons	Site Investigation	2	Along drainage path	Soil	TPH and RCRA metals
Railroad Tracks	Creosote, ordnance, solvents, chemicals	Site Investigation	10 composite	Distributed through railyard	Soil	TPH, pesti- cides, and BNAs
Berths 1 - 5	Ordnance, solvents, chemicals	Site Investigation	Approximately 15 composite	Sediments present Sediment under drains	Sediment	Priority pollu- tants
Asbestos	Asbestos	Site Investigation		Buildings 623 and 624 and Berths 1-4	Asbestos survey	Asbestos



- Railroad Tracks. POL, solvents from train activities, and hazardous materials from potential spills during unloading may be present in the soil. Soil samples should be collected where tracks are still present or were in the past. Approximately 40 sampling locations are recommended. These samples should be composited into a total of ten samples and analyzed for TPH, pesticides, and base neutral acid extractable compounds (BNAs) on EPA's priority pollutants list.
- Berths 1 to 5. Drainage holes drilled through the floors of the berths provide the most likely pathway for the migration of contaminants. These holes drain to the Mississippi River or fill sediment under the berths. Although there are no spills on record, it is possible that spills occurred in the past. The fill sediment should be sampled under the drains. The samples should be analyzed for priority pollutants, given the uncertainty of the chemicals which may have been spilled.
- <u>Asbestos</u>. An asbestos survey is recommended for the entire facility because none has been performed to date.



SECTION 1

INTRODUCTION

1.1 BACKGROUND

Roy F. Weston, Inc. (WESTON) has been retained by the U.S. Army Toxic and Hazardous Materials Agency (USATHAMA) to conduct waste site characterizations of specific Department of Army properties under the authority of Contract DAAA15-88-D-0007, Task Order 2. This work is being performed within the scope of the U.S. Army Installation Restoration Program (IRP). As part of this contract, WESTON has also been asked to prepare enhanced preliminary assessment (PA) reports of selected properties destined to be included as part of the Base Closure Program. The PA reports are to present WESTON's findings concerning the environmental conditions of the properties and to provide recommendations for further action. These recommendations will serve as a guide to the U.S. Army in prioritizing the activities required to report these properties as excess.

This report discusses the enhanced preliminary assessment of the New Orleans Military Ocean Terminal (New Orleans MOT). A site visit was performed on 24 October 1989.

1.2 OBJECTIVES

This enhanced PA report was prepared using existing information obtained from property records and from current employees. No sampling activities were completed as part of this assessment.

The overall objectives of the PA were as follows:

- Identify and characterize environmentally significant operations (ESOs) associated with the historical and current use of the New Orleans MOT property.
- Identify and characterize possible impacts of the ESOs on the surrounding environment.
- Identify additional environmental actions, if any, that should be implemented for the ESOs identified.

Certain issues have been excluded from consideration as ESOs for the purposes of this report. First, painted surfaces will not be identified as ESOs solely because there is a potential for their containing lead. Second, drinking water will not be designated as an ESO solely because there is a potential for lead contamination due to piping solder or piping materials. Third, the presence of radon gas in buildings will not be considered as an ESO. A radon survey of all buildings will be performed utilizing the guidelines set forth in the Army Radon Program.



1.3 PROCEDURES

The information contained in this enhanced PA report is based on the following data-gathering activities:

Visual inspection of the facility.

Review of available Army documentation.

• Review of U.S. Environmental Protection Agency Region VI files.

Contact with the Louisiana Department of Environmental Quality.

Interviews with current employees at New Orleans MOT.

No sampling or analysis was conducted as part of the investigation.

1.4 REPORT FORMAT

This enhanced PA report presents an evaluation of the relevant data for the New Orleans MOT site.

Section 2 describes the property and the surrounding environment and land uses. Section 3 identifies and characterizes all ESOs related to known and suspected releases to the environment. Section 4 discusses the potential impact of the ESOs on the local environment and human receptors. Section 5 summarizes the findings and conclusions, discusses the quality and reliability of the supporting information, identifies areas requiring further action, and suggests how such actions may be accomplished. Section 6 lists the pertinent materials reviewed and the agencies that were contacted. Photographs taken during the site visit are provided in Section 7. Supporting documentation is provided in Appendices A through F.

References are presented throughout this report, where appropriate, by means of a letter and number designation in brackets, as follows: I refers to Direct Interviews; T refers to telephone conversations; and R refers to Reports or other written documents. The number following the letter refers to the specific item in the respective lists provided in Section 6.



SECTION 2

PROPERTY CHARACTERIZATION

2.1 GENERAL PROPERTY INFORMATION

New Orleans MOT is located on the northwest intersection of the Mississippi River and the Inner Harbor Navigational Canal (Mississippi River-Gulf Outlet Canal) within the corporate limits of New Orleans, Louisiana. This installation is also known as the New Orleans Army Base and as the Gulf Outport. An area map and a property information summary are shown in Figure 2-1 and Table 2-1, respectively.

New Orleans MOT is comprised of property operated by the Army, property used by the U.S. Maritime Administration (MARAD) per an Interservice Support Agreement (ISSA), property leased to the Board of Commissioners, Port of New Orleans (Dock Board), and property leased from the Dock Board. This land belongs to the city with all improvements belonging to the Army. Contiguous to the facility is the Naval Support Activity (NSA). A site map of the facility with property divisions is shown in Figure 2-2.

2.2 DESCRIPTION OF FACILITIES

2.2.1 GENERAL PROPERTY DESCRIPTION AND HISTORY

Construction of New Orleans MOT was completed in 1919. On 15 September 1922 fire destroyed the wooden wharves and wharfhouse. Reconstruction of the facility continued in three stages until completion of Berths 1 through 4 in 1942. Berth 5 was added in 1945. Berths 1 through 4 are enclosed and Berth 5 is open (photos 1, 2) [R-4].

All of the berths are built on timber pile foundations and consist of reinforced concrete and structural steel above the water level. The structures cover a total of approximately 499,711 sq ft (11.47 acres). Transit sheds cover Berths 1 through 4 for a total enclosed area of approximately 281,848 sq ft. Berths 1, 2 and part of 3 are used by New Orleans MOT. The rest of Berth 3 and the wharf space in front of Berths 1, 2, and 3 are leased to MARAD. Berths 4 and 5 and the remaining wharf space is leased to the Dock Board. Located on the NSA property are three warehouses that are used to store most of the material processed through New Orleans MOT [I-1; R-4].

The facility can be divided into two major activities: warehousing and shipping, and privately-owned vehicle (POV) shipment preparation. New Orleans MOT has had the assignment of shipping materials through New

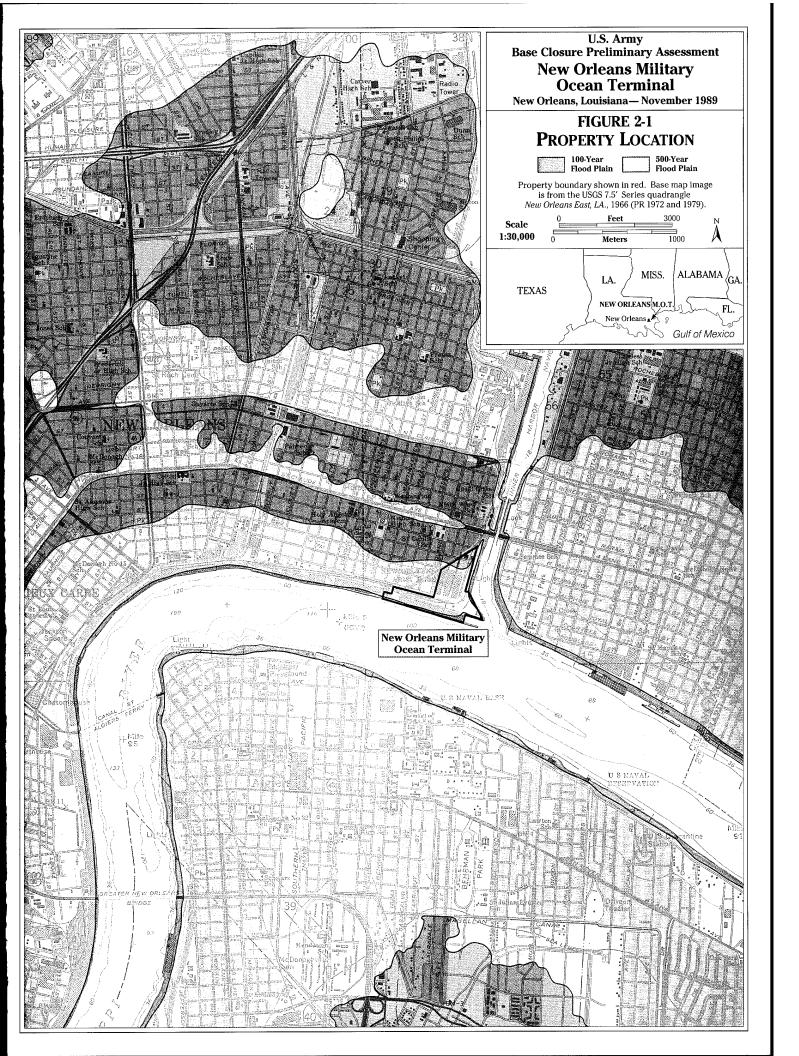




Table 2-1

Property Information Summary

Name: New Orleans Military Ocean Terminal

Facility Address: Military Traffic Management Command

Gulf Outport

4400 Dauphine Street

New Orleans, LA 70146-6000

FFIS: LA-213522703

Property Number: 22585

Command: Military Traffic Management Command

County: Orleans Parish

Location: At the northwest intersection of the Mississippi

River and the Inner Harbor Navigation Canal (Mississippi River-Gulf Outlet Canal) within the

corporate limits of New Orleans, Louisiana.

Installation Coordinates: 29°57'N; 90°01'W

Size: 14.99 acres

Mission: To provide common user terminal services for

Department of Defense (DoD) sponsored cargo through Gulf Coast ports from Brownsville, Texas, to Cape Sable, Florida. Operate privately owned vehicle

(POV) Processing Center, Granite City, Illinois

Operations: Current operations include warehouse and shipping

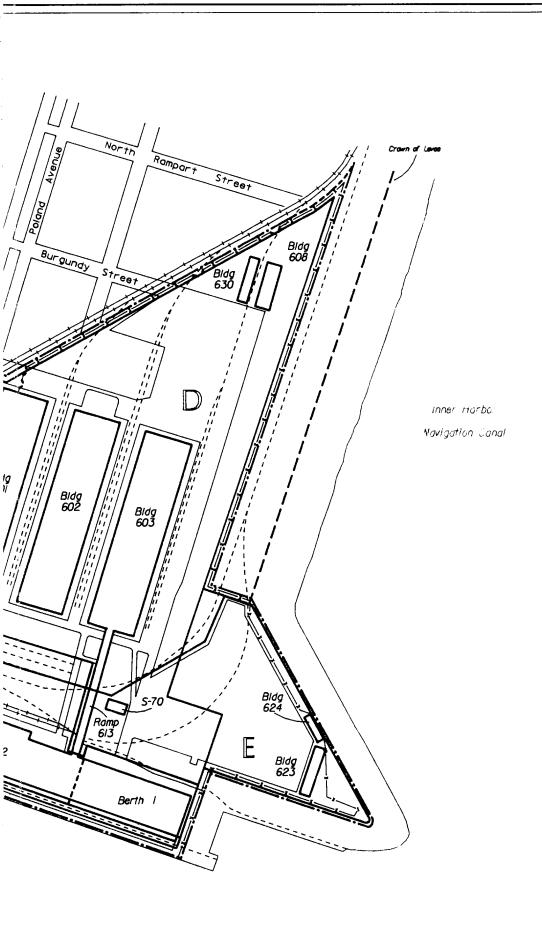
activities and POV vehicle pre-shipment main-

tenance.

SITE LAND USE A Leased to Dock Board ${f B}$ Leased to MARAD \mathbb{C} Army D Naval Support Activity E Leased from Dock Board Dauphine Street Street Bidg 60i Bidg 602 Berth 5 Berth 4 Berth 2 Mississippi River



---- Former Ratiroad

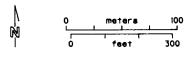


U. S. Army
Base Closure Preliminary Assessment
New Orleans
Military Ocean Terminal

New Orleans, LA - November 1989

Figure 2–2 Site Plan With Land Use

Compiled in 1989 from various sources provided by the U.S. Army Toxic and Hazardous Materials Agency





Orleans since 1919, although this activity was interrupted to an uncertain extent from 1922 to 1942. Currently a wide range of equipment and material is processed through this facility including:

- Military equipment.
- POVs.
- Supplies for post exchanges (PXs).
- Ordnance.
- Chemicals and compressed gases.

The equipment and materials handled have not changed significantly since World War II. A more detailed breakdown of equipment and materials handled is provided in Appendix A. A detailed discussion of the identified ESOs as they relate to hazardous materials handled is presented in Section 3.

Also present at this installation is a POV processing center and shipping facility. All fuel is removed from the vehicles prior to shipment. Outdoor POV storage consists of approximately 9.04 acres leased from the Dock Board and NSA.

2.2.2. GENERATION AND DISPOSAL OF WASTES

Solid waste is stored in roll-off containers prior to its disposal by a private contractor. The current contractor is River Parish Disposal, Inc. There is no generation or disposal of hazardous waste at the facility. Sanitary wastewater is discharged to the city sanitary sewer system.

2.3 PERMITTING STATUS

The following agencies were contacted regarding the status of permits for New Orleans MOT [T-1; R-8, R-9]:

- EPA Region VI no permits.
- Louisiana Department of Environmental Quality (DEQ), Office of Air Quality and Nuclear Energy no permits.
- Louisiana DEQ, Office of Water Resources no permits.
- Louisiana DEQ, Office of Solid and Hazardous Waste no permits.

The facility's EPA Hazardous Waste Generator I.D. Number is LA5-21-359-9314 (Appendix B). However, the facility has identified itself as a non-generator of hazardous waste. There is no record of any hazardous waste manifested [T-1]. New Orleans MOT also submitted an Underground Storage Tank Registration, listing four tanks (Appendix C). The status of these tanks will be discussed in greater detail in Subsections 3.1 and 3.2.



2.4 GENERAL ENVIRONMENTAL INFORMATION

2.4.1 DEMOGRAPHICS AND LAND USE

New Orleans MOT is located on the Mississippi River in New Orleans. The surrounding land is mainly residential with some commercial activity. Other shipping and warehousing operations are located along the river.

No nearby contamination sources were identified in the Comprehensive Environmental Response, Compensation Liability Inventory System (CERCLIS) listing for New Orleans (Appendix D). Other than local port operations along the river, no likely sources were identified either during personnel interviews or the site survey [I-1, I-2].

2.4.2 CLIMATE

The climate of New Orleans is humid and semi-tropical during a large portion of the year. New Orleans is virtually surrounded by water. The water bodies include the Gulf of Mexico, Lake Pontchartrain, Lake Borgne, and numerous bayous, lakes, and marshy delta land. These water bodies have a significant influence on the climate. New Orleans is south of the usual track of winter storms, but occasionally a storm center will form in the Gulf of Mexico.

Figure 2-3 shows wind conditions for New Orleans for the year 1988. The wind direction at New Orleans is fairly evenly distributed. North winds occur most frequently with a secondary maximum of south winds. Summer winds have a prevailing southerly direction providing moisture favorable for the formation of afternoon thunderstorms. West to northerly winds cause periods of hot dry weather during the summer.

Precipitation is fairly evenly distributed throughout the year. A definite rainy period occurs from December to March. Summer precipitation occurs mainly from frequently heavy showers and thundershowers. July (6.73 in.), August (6.02 in.) and September (5.87 in.) are the wettest months. October is the driest month with normal precipitation of 2.66 in. The maximum monthly precipitation recorded was 25.11 in. during October 1937. Snowfall is rare with a annual mean value of 0.1 in.

Temperatures are moderated by the surrounding water bodies. July is the hottest month with a normal monthly temperature of 82.1°F and a daily maximum of 90.7°F and a daily minimum of 73.5°F. The daily maximum temperature during June (89.5°F), July (90.7°F), and August (90.2°F) show little variation. January is the coldest month with a normal monthly temperature of 52.4°F, and a daily maximum of 61.8°F and daily minimum of 43.0°F.

Severe thunderstorms with damaging winds and hail are infrequent. Thunderstorms with heavy rains are common. Thunderstorms occur on an average of 68 days per year. Tornadoes are rare, but water spouts occur quite often on nearby lakes. Hurricanes and tropical storms do move close enough to New Orleans to affect the area. Tropical storms can produce high winds, heavy rain, flooding, and tornadoes. Severe damage can occur during tropical storms. Although these storms have occurred in the past, the frequency of occurrence is quite low [R-10, R-11].

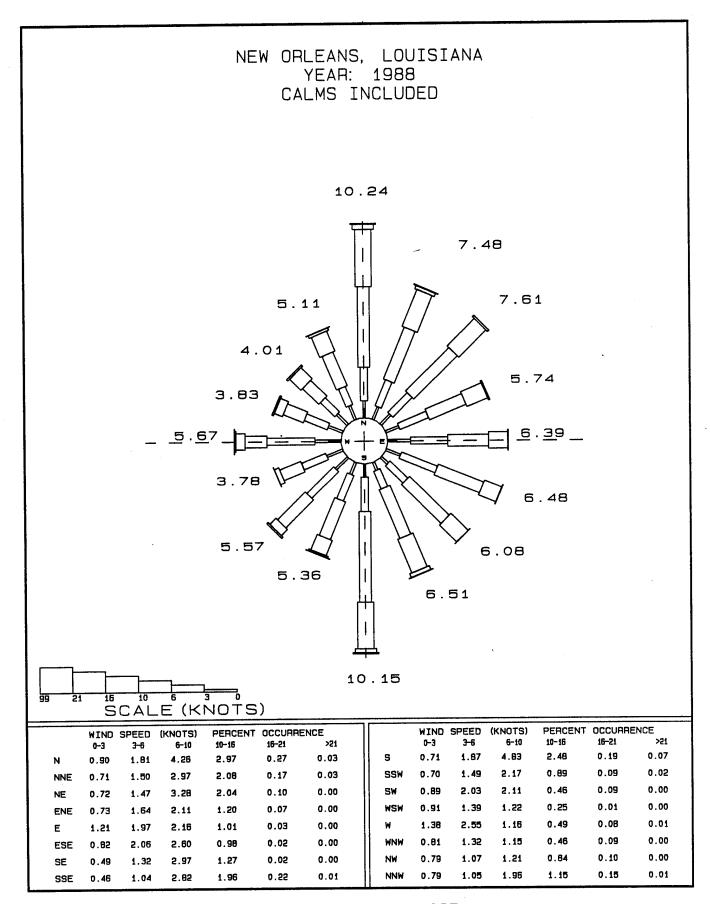


FIGURE 2-3 WIND ROSE



2.4.3 SURFACE WATER AND PHYSIOGRAPHY

New Orleans MOT lies below the mean highwater of the Mississippi River. The facility is located within a Zone B area, "areas protected by levees from the base flood" [R-12]. The levee has a crest elevation of 24 ft above the Mean Gulf Level (MGL). The river serves as a public drinking water source and is a vital corridor of industrial and commercial activity. Two water treatment plants pump water from the Mississippi River to serve the New Orleans metropolitan area. Both water intakes are located upriver from New Orleans MOT [T-2].

2.4.4 SOILS

New Orleans is underlain by thick sequences of unconsolidated deposits of sand, silt, clay, and gravel. Subsurface materials in the New Orleans area consist of recent flood plain and deltaic alluvial deposits associated with river deposits and marshlands. Zones of organic clay characteristic of backswamp material are mixed with these sediments. Loess, a wind-derived sediment composed predominantly of silt-sized grains, may also be present in some areas. Soil material generally consists of silty clays interrupted by dense clay lenses that impede the downward migration of surface water. These materials are deposited in a structural trough known as the Mississippi embayment that plunges gulfward. The resulting wedge of sediments thickens seaward with a prevailing dip to the south [R-3].

The soil consists of lean to fat clays, silts, and fine sands, and contain beds of organic materials and peat bogs up to 10 feet thick. All soils are saturated. Soils vary in makeup from almost nonplastic silts to highly plastic clays, and they contain varying amounts of sand and organic debris [R-4].

2.4.5 GROUNDWATER AND HYDROLOGY

In the New Orleans area, usable quantities of fresh groundwater are difficult to encounter at any depth below the ground surface. The groundwater at the facility was reported as brackish and is believed to be generally 8 to 10 ft below ground. This shallow aquifer is expected to flow toward the river when the river is in low stage and away when the river is high. The shallow aquifers, less than 150 ft, that may exist have low yields. These water-bearing deposits include point bar and distributary channel deposits associated with the Mississippi River [R-2, R-3].

There are approximately 10 registered wells within 3 miles of the facility in the area north of the Mississippi River and west of the Gulf Outlet Canal (Appendix E). The nearest well is located within 1,000 ft of the facility. This well is expected to be brackish. All wells are drilled to a depth of 700 to 800 ft. None of these wells are used as a drinking water source [R-1]. The aquifer pumped in each case is the Gonzales-New Orleans Aquifer. As of 1981 the saltwater-freshwater interface is one mile north of the facility. The other major deep aquifers are also brackish or saline in this area [R-2].



2.4.6 FLORA AND FAUNA

The majority of New Orleans MOT is paved. On the unpaved areas, grasses, some shrubs and small trees are present. There are no permanent examples of fauna other than rodents and birds. A list of fauna found in New Orleans is provided in Appendix F.

2.4.7 SENSITIVE ENVIRONMENTS

There is no evidence of sensitive wildlife within 3 miles of the facility. The pallid sturgeon, a species proposed for listing, and the salt marsh top minnow, a rare fish, have been detected in the Mississippi River, south of New Orleans. There are wetlands within one mile of the facility. There are at least seven waterbird nesting colonies in this portion of the river and also in the deltaic marshes (Appendix F).



SECTION 3

ENVIRONMENTALLY SIGNIFICANT OPERATIONS

The objective of this section is to document areas where hazardous materials are managed and to identify known or potential releases of these materials into the environment and their likely migration pathways. The locations of all identified ESOs are depicted in Figure 3-1.

3.1 UNDERGROUND STORAGE TANKS (RAMP 613)

3.1.1 DESCRIPTION

Three 1,000-gal, single-wall fiberglass tanks are located adjacent to Ramp 613 (photo 3). The tanks are equipped with steel piping. Each tank was installed in 1982 to replace similar steel tanks that had been in place since the 1940s. Diesel fuel for vehicles is stored in Tank 601-1. Tank 601-2 was previously used to store waste fuel. It is currently inactive and reportedly empty. Gasoline is stored in Tank 601-3. These tanks are registered with the state [R-5]. Four monitoring wells for leak detection are planned to be installed before January 1990 [I-2]. The ground above these tanks is paved.

3.1.2 KNOWN AND SUSPECTED RELEASES

One of the three tanks replaced in 1982 was found to be leaking [R-5]. The specific tank that leaked and the extent of cleanup that occurred is unknown. The current tanks were leak tested at installation; no leaks were detected.

3.2 UNDERGROUND STORAGE TANKS (BUILDING 623)

3.2.1 DESCRIPTION

One 1,000-gal steel tank with steel piping is located west of Building 623. This tank, installed in the 1940s, is used to store fuel mixtures removed from vehicles during pre-shipment processing and is registered with the state [I-2; R-5]. This fuel is reused to operate onsite vehicles. Three monitoring wells for leak detection are planned for installation before January 1990. The ground above this tank is paved.

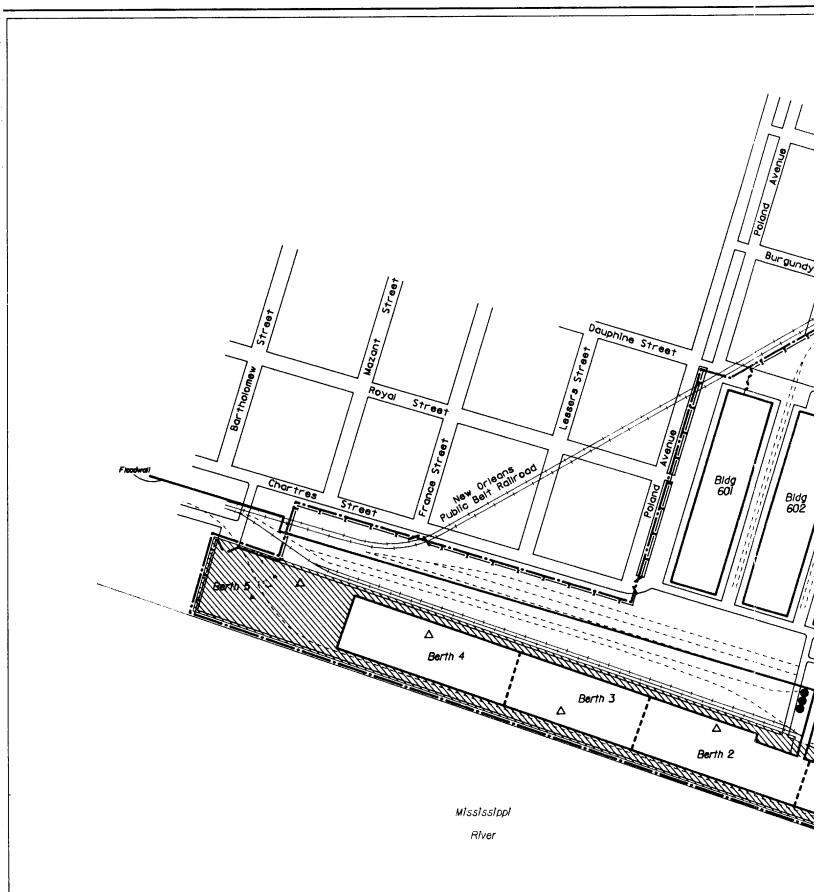
3.2.2 KNOWN AND SUSPECTED RELEASES

This tank was leak tested in 1988 and no leaks were detected.

3.3 POTENTIAL UNDERGROUND STORAGE TANKS (BOAT RAMP)

3.3.1 DESCRIPTION

In the past, a fuel pump area was located adjacent to the boat ramp. The gasoline pumps were removed in 1979. It is believed that two tanks were





U.S. Army Taxlo and Hazardous Materials Agency

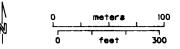
Rampart Burgundy inner Harbor Mavigation Curist Bidg 602

NOTE: Possible asbestos-containing

materials present in buildings 623,624 and berths I through 4. U. S. Army
Base Closure Preliminary Assessment
New Orleans
Military Ocean Terminal
New Orleans, LA — November 1989

Figure 3–1 Environmentally Significant Operations

Compiled in 1989 from various sources provided by the U.S. Army Toxic and Hazardous Materials Agency



ENVIRONMENTALLY SIGNIFICANT OPERATIONS

- O Potential Underground Storage Tank
- Underground Storage Tank
- △ Transformer
- Building 623-Vehicle Defueling
- ☐ Vehicle Wash Rack
- 🖾 General Storage and Material Hauling
- --- Former Railroad
- --- Current Railroad



not removed at that time and remain in the ground. The sizes of the tanks, if present, are not known [I-2; R-5]. This area is paved.

3.3.2 KNOWN AND SUSPECTED RELEASES

There is no record of any testing done at the time the fuel pumps were removed.

3.4 POTENTIAL UNDERGROUND STORAGE TANK

3.4.1 DESCRIPTION

During the site survey, 1/4-in. steel piping was discovered that led underground behind Building 623, which could indicate a potential tank. However, there is no record of a tank in this location.

3.4.2 KNOWN AND SUSPECTED RELEASES

There is no evidence of vegetation stress in the area.

3.5 TRANSFORMERS

3.5.1 DESCRIPTION

Six transformers stations were identified during the site survey. All 19 transformers appeared to be in good condition with only slight corrosion visible (photo 4). None of the transformers has been tested for PCBs [I-2].

3.5.2 KNOWN AND SUSPECTED RELEASES

There are no visible leaks or stains near any of the transformer stations. A potential release from one of the transformers in the berths would affect either the Mississippi River or the fill under the berths. A potential release from the station on the parking lot would likely seep into the ground through cracks in the asphalt and perhaps to the Gulf Outlet Canal through the storm sewer.

3.6 FUEL UNLOADING AREA

3.6.1 DESCRIPTION

In Building 623 (photo 5), a small air-operated pump is used to remove fuel from POVs prior to shipment [I-2]. This mixed fuel is subsequently stored in an underground storage tank (see Subsection 3.2) and used onsite to operate vehicles. Building 623 has a concrete floor with a trench drain in the area. These drains reportedly are connected to the city storm sewer [I-1, I-2].

3.6.2 KNOWN AND SUSPECTED RELEASES

There is no evidence of releases in the area. The floor is clean and the area is well maintained.



3.7 VEHICLE WASH RACK

3.7.1 DESCRIPTION

Prior to 1987, vehicles were washed on a concrete pad behind Building 623 [I-2]. Vehicles have not been washed here since before 1987. There are no drains in the area. The area around the pad is unpaved. There is no information on whether any other maintenance activities, including engine washing, occurred here.

3.7.2 KNOWN AND SUSPECTED RELEASES

Wash water would have runoff to the surrounding ground. There is no evidence of vegetation stress nor visible stains in this area.

3.8 RAILROAD TRACKS

3.8.1. DESCRIPTION

In the past, this facility made extensive use of rail lines to transport materials. Many of the tracks present in 1963 have since been removed or covered by pavement. Rail lines have been used to transport ordnance, chemicals, and other hazardous materials. An extensive rail yard was present behind the berths. In the past, these tracks covered approximately 320,000 sq ft.

3.8.2 SUSPECTED AND KNOWN RELEASES

There is no record of any spills from the unloading or railroad operations [I-1; T-3]. Since spills due to unloading operations are not uncommon, some chemical releases could have occurred. Any contamination probably would have affected the soil and shallow groundwater.

3.9 BERTHS 1 TO 5

3.9.1 DESCRIPTION

These berths have been used since World War II for general storage and warehousing operations. The variety of hazardous materials currently stored is quite extensive and includes munitions, compressed gases, corrosives, flammables, and oxidizers (photos 6, 7, 8). The floor of the facility is concrete with holes drilled to allow discharge directly to the Mississippi River or the fill under the berths. These holes were drilled to permit drainage flow to low spots. The largest container present at the time of the survey was a 55-gal drum. Approximately 2,000 gal of hazardous material was surveyed, based on a drum count. Incompatible materials are not segregated.

3.9.2 SUSPECTED AND KNOWN RELEASES

There is no record of any spills from the unloading or warehouse operations [I-1, I-4; T-3]. Some chemical releases could have occurred because spills due to unloading operations are not uncommon. Any spill that was not cleaned up would most likely have drained to the Mississippi River or to the fill under the berths.



3.10 ASBESTOS

3.10.1 DESCRIPTION

Transite siding was tentatively identified on Buildings 623 and 624 (photos 9, 10). This material is known to contain asbestos fibers. None of the buildings, however, has been surveyed for asbestos.

3.10.2 KNOWN AND SUSPECTED RELEASES

There is no documentation of asbestos release. No damaged insulation was observed.



SECTION 4

HUMAN AND ENVIRONMENTAL RECEPTORS

The pathways by which human and environmental receptors may be exposed to site-related chemicals are discussed in this section.

4.1 GROUNDWATER

Infiltration and percolation to the groundwater is minimal because much of the property is paved. The groundwater in this area is brackish and unfit for consumption. Drinking water for the greater New Orleans area is obtained from the Mississippi River. If any contaminants were to penetrate the asphalt or concrete floors of the buildings through cracks, they could reach the groundwater 8 to 10 ft below. All registered wells within 3 miles are drilled to 700 to 800 ft, and it is anticipated that they would not be affected by the contaminants. The shallow groundwater would be expected to eventually discharge to the Mississippi. However, the concentrations would be expected to be quite dilute. There are no records of the shallow groundwater being used in this region. The effects on human and environmental receptors exposed to groundwater are anticipated to be minimal.

4.2 SURFACE WATER

Stormwater runoff is collected by stormwater sewers and is discharged to the city storm sewer system, which discharges to the Gulf Outlet Canal. No ongoing discharges or surface contamination was apparent during the site inspection; therefore, no impact on human and environmental receptors from surface water is expected. Any spills in the berths could drain directly to the Mississippi River, or to the fill land underneath the berths. Contaminants, if present in this sediment, could leach or be eroded into the Mississippi River. Any contaminants that would reach the river would be significantly diluted. Impact on aquatic life and waterbirds in the area is expected to be low.

4.3 AIR

No permanent sources of air contaminants are known to be present onsite. Therefore, no human or environmental receptors would be impacted by air contaminants at the site. However, the potential exists for exposure to asbestos from the siding in some of the buildings if it is removed or damaged.

4.4 SOILS

Because most of the site is paved with asphalt, little direct contact with contaminated surfaces is anticipated. An underground storage tank, which was replaced in 1982, was found to have leaked. The effect of this release to the environment is unknown. There is no evidence of leakage from



transformers or any other releases to the soil. Soil contamination from organics near the vehicle wash rack or the railroad tracks is possible, and could present a direct contact hazard to workers in these areas. A spill in one of the berths could drain to the fill land underneath.

4.5 OTHER HAZARDS

4.5.1 FIRE AND EXPLOSIONS

Transformers present a risk of fire and explosion. However, the risk of fire and explosion does not appear to be any greater than for transformers at other industrial sites. Once chemicals stored at the site are removed prior to property transfer, there would be no other known fire or explosion hazard present.

4.5.2 DIRECT CONTACT

The walls and floors of buildings that housed hazardous materials may have absorbed contaminants that could be contacted by personnel at a later time. Such buildings include Buildings 623, 624, and the five berths. Building surfaces, if contaminated, may provide a direct contact hazard to site personnel.



SECTION 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 SUMMARY OF FINDINGS

New Orleans MOT is a large, urban warehouse and shipping operation located on the Mississippi River. The facility is located in a residential section of New Orleans. Construction of the facility began in 1917. Wetlands have been identified within one mile of the facility.

There are approximately 10 registered wells within 3 miles of the installation. None are used for drinking water. The aquifer used in this area is approximately 700 ft deep.

There are few operations that would adversely impact local human and environmental receptors. These are summarized in the following subsections.

5.1.1 UNDERGROUND STORAGE TANKS

Four existing and three potential underground storage tanks are present at the facility. Monitoring wells are to be installed by the end of 1989 around the four known underground storage tanks.

- Tank 601-1 Diesel fuel.
- Tank 601-2 Waste fuel (currently inactive). Tank 601-3 Gasoline.
- Tank 623 Recycled fuel from unloading operation.

A former pump station equipped with two underground storage tanks was also identified. These tanks are believed to be still present. During the survey, a number of 1/4-in. steel pipes that ran underground were found behind Building 623, which indicates a potential tank. These operations are mainly a threat to soil and shallow groundwater.

5.1.2 TRANSFORMERS

None of the transformers onsite appeared to be leaking. However, they have not been tested for PCBs. Ownership and operational responsibility was reported to be the NSA's. A potential release from one of the units in the berths would affect either the Mississippi River or the fill under the berths. A potential release from the station on the parking lot would likely seep into the ground through cracks in the asphalt and perhaps to the Gulf Outlet Canal through the storm sewer.

5.1.3 FUEL UNLOADING AREA

The fuel unloading operation takes place inside Building 623 over a concrete floor. Gasoline is pumped out of POVs prior to shipment. Past spills would



likely have reached the drains in the building, which discharge to the storm sewer.

5.1.4 VEHICLE WASH RACK

A concrete pad behind Building 623 was used to wash vehicles. Washwater can be expected to have seeped into the surrounding ground because there are no drains nearby. It appeared that the water would potentially drain from one corner of the pad to the ground.

5.1.5 RAILROAD TRACKS

Rail lines were used extensively to transport hazardous materials including ordnance and chemicals. Many of the tracks present in 1963 have either been removed or paved over. Potential past spills during loading operations would have affected the soil. More mobile contaminants could have migrated to the shallow groundwater.

5.1.6 BERTHS 1 TO 5

These warehouse facilities have been used to store chemicals and ordnance since at least World War II. At the time of the survey, compressed gases, corrosives, flammables, oxidizers, and ordnance were observed. Any potential spills would be expected to affect either the Mississippi River or the fill material under the berths.

5.1.7 ASBESTOS

Buildings 623 and 624 were tentatively identified as having Transite siding, a material known to contain asbestos. No damaged insulation was observed. An asbestos survey, however, has not been performed for these buildings nor the berths.

5.2 RECOMMENDATIONS FOR FURTHER ACTION

No conditions were observed on the property that appear to represent an immediate substantial threat to human health or the environment. The ESOs identified have the potential to affect human health or the environment. These recommendations are summarized in Table 5-1 and shown in Figure 5-1. Sampling and additional study is recommended as follows.

5.2.1 UNDERGROUND STORAGE TANKS

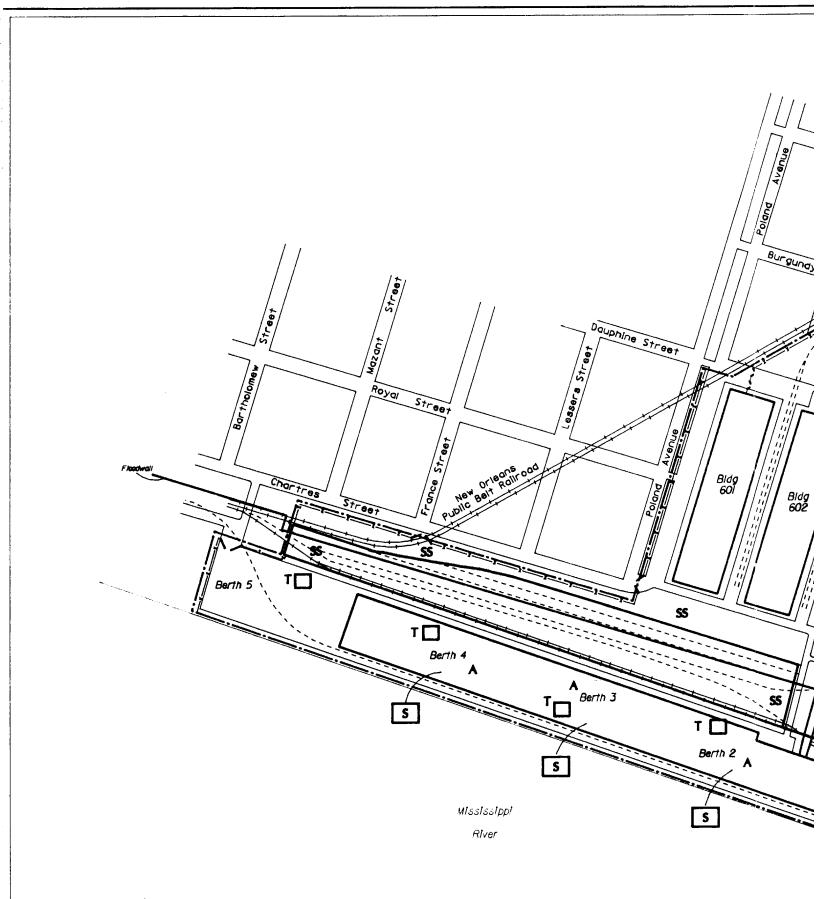
No further action is recommended because monitoring wells are planned for the tanks near Ramp 613 and the tank adjacent to Building 623. During the survey, the following areas were identified as potential locations for underground storage tanks: near the boat ramp and behind Building 623. A geophysical survey should be performed in these areas to confirm the presence of tanks.



Table 5-1

ESOs Identified at New Orleans MOT and Recommendations for Further Action

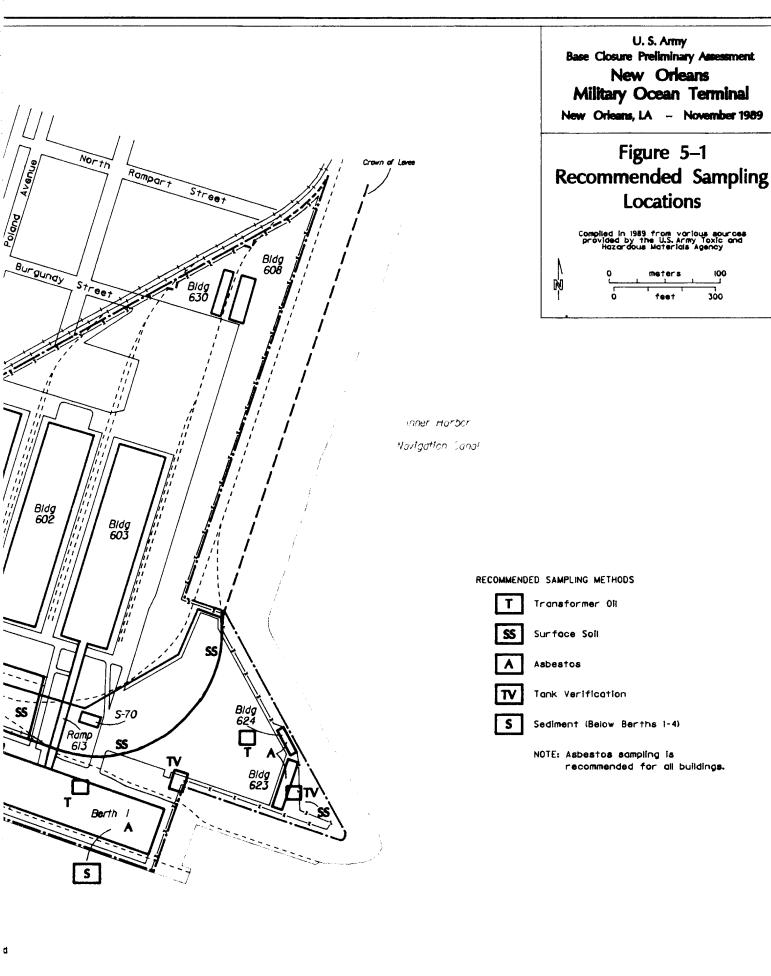
ESOs	Contaminants of Concern	Recommended Activity	Number of Samples	Location	Sample Type	Analysis
Underground Storage Tanks	Petroleum hydrocarbons	No further action		Next to Ramp 613		
↓ Underground Storage Tank	Petroleum hydrocarbons	No further action	1	In front of Building 623	1	ļ
> Potential Underground Storage Tank	Petroleum hydrocarbons	Site Investigation		Next to boat ramp	Tank verification	
⟨Potential Underground Storage Tank	Unknown	Site Investigation		Behind Building 623	Tank verification	
	PCBs	Site Investigation	l/transformer	Each transformer	Transformer oil	PCBs
${\cal L}$ Fuel Unloading Area,	Petroleum hydrocarbons	Site Investigation	_	Floor drain	Orain sediments	ТРН
ZVehicle Wash Rack	Petroleum hydrocarbons	Site Investigation	2	Along drainage path	Soil	TPH and RCRA metals
#Railroad Tracks /	Creosote, ordnance, solvents, chemicals	Site Investigation	10 composite	Distributed through railyard	Soil	TPH, pesti- cides, and BNAs
§ Berths 1 - 5 /	Ordnance, solvents, chemicals	Site Investigation	Approximately 15 composite	Sediments present Sediment under drains	Sediment	Priority pollu- tants
/ Asbestos /	Asbestos	Site Investigation		Buildings 623 and 624 and Berths 1-4	Asbestos survey	Asbestos





---- Former Railroad

LS. Army Toxic and Hazardous Materials Agency





5.2.2 TRANSFORMERS

A sample of dielectric fluid should be obtained from each transformer and analyzed for PCBs. Each unit should be labeled appropriately as a PCB, PCB-contaminated, or non-PCB transformer, depending on the individual analytical results.

5.2.3 FUEL UNLOADING AREA

A sediment sample in the bottom of the trench drain in the fuel unloading area should be sampled and analyzed for TPH. The drain is the most likely pathway for any fuel spills.

5.2.4 VEHICLE WASH RACK

Split-spoon soil samples taken at a depth of 18 in. should be collected at two locations along the drainage pathway from the concrete wash rack. Samples at each location should be analyzed for TPH and RCRA metals.

5.2.5 RAILROAD TRACKS

Most of the area is now paved. Forty 18-in. split-spoon soil samples should be collected below the asphalt surface. These samples should be distributed throughout the yard and along the single rail line that ran through the facility. These samples should be composited into groups of four and analyzed for TPH, pesticides and BNA compounds on the EPA's priority pollutants list. These compounds represent constituents that may be present from chemicals that may have been stored since World War II.

5.2.6 BERTHS 1-5

Sediments under each of the drains should be sampled. There are approximately 15; the exact number of drains is uncertain. Three 18-in. split-spoon samples should be collected from under each drain and composited. The composite samples should be analyzed for priority pollutants because of the uncertainty of the chemicals that may have been spilled since World War II.

5.2.7 ASBESTOS

Samples of the siding from Buildings 623 and 624 should be collected. Although no other material was identified, Buildings 623 and 624 and Berths 1 to 4 should be surveyed for asbestos.



SECTION 6

REFERENCES

6.1 DIRECT INTERVIEWS

- I-1 Chief, Office of Facilities Engineering MTMC Gulf Outport 24 October 1989
- I-2 Civil Engineering Technician MTMC Gulf Outport 24 October 1989
- I-3 Cargo Control Specialist MTMC Gulf Outport 24 October 1989
- I-4 Stevedore, Ryan-Walsh, Inc. 24 October 1989

6.2 TELEPHONE INTERVIEWS

- T-1 Louisiana Department of Environmental Quality 14, 18, 19, 22, 27 September 1989
- T-2 New Orleans Water Department 27 October 1989, 3 November 1989

6.3 REPORTS AND OTHER DOCUMENTS

- R-1 <u>Registered Wells in Orleans Parish</u>, Louisiana Department of Transportation and Development.
- R-2 Ground Water for the Mississippi River Parishes in the Greater New Orleans Area, Louisiana Water Resources Basic Records Report No. 11; United States Department of the Interior Geological Survey in Cooperation with Louisiana Department of Transportation and Development Office of Public Works, 1983.
- R-3 Ground Water Resources of the Greater New Orleans Area, Louisiana Water Resources Bulletin No.9, Department of Conservation Louisiana Geological Survey and the Louisiana Department of Public Works; 1966.
- R-4 <u>Settlement Study 1972</u>, Condensed Version.
- R-5 <u>Louisiana Tank Project</u> Contract No. N62467-87-C-0264, Engineering, Design and Geosciences Group, Inc. 1978.

WESTERN.

- R-6 Preliminary Report of Excess at New Orleans Army Base, U.S. Army Corps of Engineers Fort Worth District, 1989.
- R-7 <u>Installation Assessment Army Base Closure Program</u>, New Orleans Military Ocean Terminal, New Orleans, Louisiana, the Bionetics Corporation, 1989.
- R-8 Water Management Division, U.S. Environmental Protection Agency, Region VI, 3 October 1989 letter to Roy F. Weston, Inc.
- R-9 U.S. Environmental Protection Agency, Region VI, 4 October 1989 letter to Roy F. Weston, Inc.
- R-10 <u>Climate of the States 2, Western States</u>, Water Information Center, Inc. Port Washington, NY, 1974.
- R-11 1988 Local Climatological Data, Annual Summary with Comparative Data, New Orleans, Louisiana, National Oceanic and Atmospheric Administration, Asheville, NC.
- R-12 Flood Insurance Rate Map, City of New Orleans, Orleans Parish, Federal Emergency Management Agency.

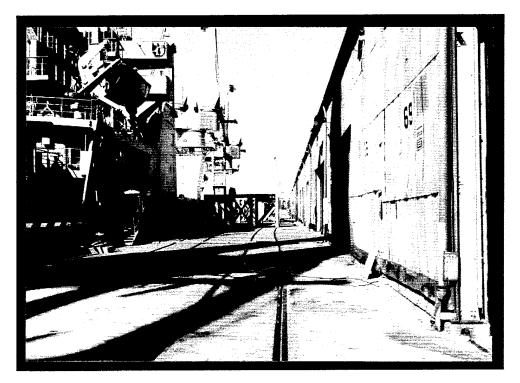
WESTERN.

SECTION 7

PHOTOGRAPHS

Photographs of ESOs taken during WESTON's site visit are included in this section.



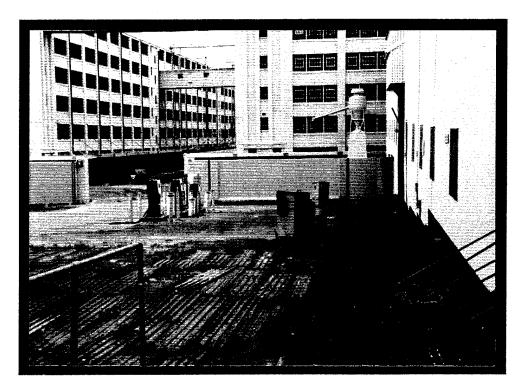


1. BERTHS 1 TO 4 - RIVER SIDE

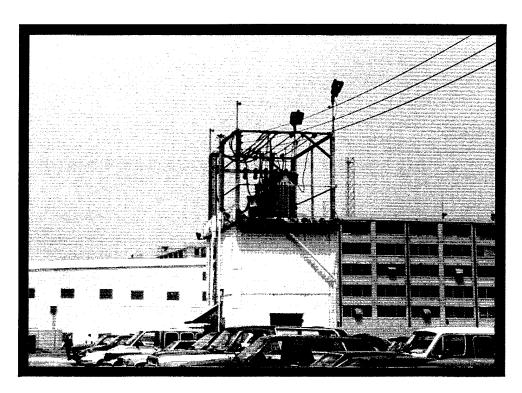


2. BERTHS 1 TO 4 - LAND SIDE





3. UNDERGROUND STORAGE TANKS (RAMP 613)



4. TRANSFORMER STATION





5. FUEL UNLOADING AREA - BUILDING 623



6. MATERIAL STORAGE - BERTH 1



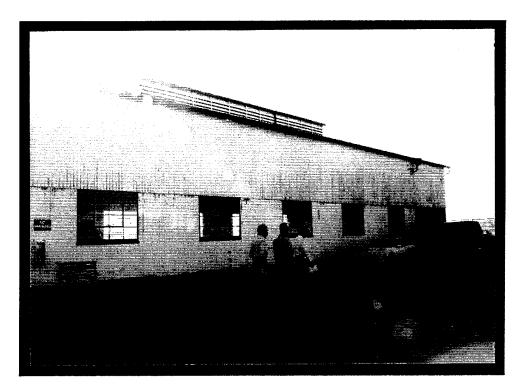


7. MATERIAL STORAGE - BERTH 1



8. OUTSIDE STORAGE - BERTH 1





9. **BUILDING 623**



10. BUILDING 624



APPENDIX A

SUMMARY OF OPERATIONS (EXCERPTS)

current mission and operations

general



Gulf Outport has the general mission of planning for and accomplishing the expeditious movement of Government-sponsored cargo in the New Orleans/gulf coast area. As directed by HQ MTMCEA, Gulf Outport must:

- . Receive, stage, and move all export and import shipments transiting the outport.
- 2. Operate a container freight station.
- 3. Monitor and document all DOD shipments transiting through the Port of New Orleans.
- 4. Pack and crate shipments for the outport and other agencies, as necessary.

- 5. Provide cargo security for Gulf Outport.
- 6. Command troops assigned to the outport.

Within the scope of the Gulf Outport mission are three operational areas: container stuffing, port operations (breakbulk and barge), and personal property shipment. Included in the personal property shipment is the receiving and shipping of privately owned vehicles (POVs), as well as the shipping and storage of household goods (HHG).

Since 1973, a general reconfiguration of the cargo operations area has taken place. The cargo operations areas, both import and export, are roughly bounded by Third Street southward to the water and A Street eastward to the levee. The POV processing and storage area is located in the southeastern corner of the outport and in the first four rows of the parking lot north of Building 601 and west of A Street. Household goods are stored mainly on the first floor of Building 601 and in the transit shed. Most administrative offices are located in either Building 601 (second floor) or the transit shed.

A-2

Gulf Outport is considered to be a major tenant of the Navy because it leases, from the Navy, all of its administrative and covered storage space, with the exception of the transit shed and wharf. Other major tenants in the terminal are: the Coast Guard, Military Sealift Command (MSC), Navy Public Works Center, and 4th Marine Air Wing (MAW). The New Orleans Dock Board leases part of the transit shed (sections 4 and 5) (see fig I-2) and the open wharf area from Gulf Outport.

port operations

general

Port operations at Gulf Outport include loading, unloading, and staging of breakbulk and barge cargo, and stuffing and unstuffing of containers. These activities are controlled by the Cargo Operations Division control center, located in Building 601. Gulf Outport currently handles about 44,650 MTON of breakbulk and barge cargo per month and 9,713 MTON of containerized cargo per month (based on FY 78 through FY 80 figures). Under present workloads, existing berth space is adequately used.

at the northeastern corner of Building 601, as shown transit-shed receiving area on the city side of section 1. When possible, cargo receiving and staging in the Cargo enters Gulf Outport by rail and truck. Inbound tractor-trailers/containers receive their documentaand moved to a staging area designated for a specific between warehouses is kept to a minimum, and when tion at the contractor-operated truck control center on the flow chart (fig II-4). From the truck control center, the driver is directed to an unloading dock along the east side of Building 601 or to the wharf required, it is done by contractor personnel using site. As cargo is taken off the truck, it is sorted destination or type of cargo. Transferring cargo truck is spotted, it is completely unloaded at that warehouses are performed concurrently. Once forklifts and dock trailers.

breakbulk

3 years. Table III-1 shows this trend and the breakout the majority of cargo at Gulf Outport. The breakbulk the last 9 years. General cargo and POVs comprise and containerized cargo handled at Gulf Outport over workload, at present, averages about 44,650 MTON Table III-1 shows a commodity profile of breakbulk workload has taken a downward trend over the last for import and export tonnages. Total breakbulk per month, Most of the breakbulk operations take place in Building P cargo that requires special facilities, such as the $^{+}$ first floor of Building 602 for POVs requiring special of the primary warehouses are parallel to usable rail efficient storage of cargo, with a high degree of floor lines and have loading ramps along their sides to aid space utilization, averaging about 75 percent. Both walk-through inspection of all warehouses revealed layout of the first floor of Building 601 is shown in 630 and parts of the first floor of Building 601, A cargo that requires special facilities, such as the figure III-1. Other warehouses are used to store security and Building 608 for hazardous cargo. in offloading trucks.

ramp running the length of section I westward to the Building 630, where it awaits pickup by commercial Import cargo generally is placed on the city side of carrier. Building 630 has a truck-trailer loading elevated ramp between Buildings 601 and 630 (fig

container stuffing/unstuffing

18 percent of the cargo is containerized. At present, percent in container vans and 8 percent in MILVANs) unstuffing operations is 81 percent general cargo (73 Based on statistics for FY 78 through FY 80, about and 19 percent POVs (in container vans). At times this amounts to 9,700 MTON a month. Most of the reefer cargo transits the outport; however, this is extremely rare and involves less than I percent of containerized cargo is bound for the Canal Zone, Currently, the breakdown of container stuffing/ Europe, the Far East, and the Mediterranean, container operations.

(figs III-3 and III-4). A layout of the container-stuffing tions, with loading docks running the full length of its east and west faces. This building is also accessible seen, this building is well suited for stuffing operacontainer-stuffing warehouse at Gulf Outport. The warehouse is illustrated in figure III-5. As can be available between Buildings 601 and 602, if needed side of the building is unusable because parts of it have been paved over in the POV open-storage lot. by rail on the west side. The rail line to the east east side of Building 601 is where most container operations take place; however, other ramps are The first floor of Building 601 is the primary

TABLE III-1 BREAKBULK AND CONTAINER COMMODITY PROFILE, FY 1972 THROUGH, FY 1980

	,	<u>;</u>		; ;	Export	and Impor	Import Workload	(MTON)	:		!
Code		FY 72	FY 73	FY 74	FY 75	FY 76	FY 7T	FY 77	FY 78	FY 79	FY 80
10	Aircraft, Unboxed	40	1,200	136	1	32	ı	1	ı	1,311	ı
20	Explosives	1	1	ı	S	•	i	1	•	•	ı
25	MILVANS - Explosives	,	ı	1	1	ı	1	1	ı	1	1
30	Bulk	1	•	1	1	ı	1	ı	ı	•	1
40	General	370,346	, 05	, 36	, 08	, 35	,41	, 86	,78	, 30	, 03
41	Lumber, Lots, etc.	10,588	24	23	81	70	1,440	9,674	7,587	999'6	8,898
43	Unboxed Metal Products	33,894	7,67	, 21	, 30	,15	60,	,80	,17	, 07	,07
44	CONEX	95,790	, 16	, 55	6,33	, 28	,93	, 11	,84	, 16	.87
45	MILVANs - Other	3,015	, 70	8,83	1,91	5,47	9	,82	0,10	1,04	30
47	Household Goods and Bagg	767,66	96'6	9,82	, 13	8,16	, 16	3,32	, 63	,84	4,28
20	Reefer	25,460	8,48	4,70	3,97	2,56	,27	1,94	19,76	6,40	0,14
09	Unboxed Vehicles - Heavy	73,654	9,54	0,49	6,28	2,83	,27	9,53	9,75	2,30	9,76
61	Unboxed Vehicles - Light	34,905	47	,17	1,96	,82	47	,51	7,86	3,46	, 15
62	Unboxed POVs	69,197	7,94	5,30	5,32	8,42	,47	6,43	4,59	96,0	4,28
63	RORO Trailers	131	7	7	7		. 1	. 1	. ι	. 1	. 1
73	5	157,177	185,353	180,849	193,655		41,280	138,015	185,608	191,619	167,359
1	,	1		4	1	ı	ı	1	ı	i	
1	Berth - Other	8,780		8,601	7,909	4,986	1,113	13,600	t	2,066	7,613
į į	Berth - Vehicles/MILVANS	19,726	8,87	, 65	,95	69,	,62	, 91	1	0,	0,
	Total Breakbulk Cargo	1,002,500	907,699	694,162	652,795	536,637	129,176	527,577	620,302	526,248	460,839
7	Stuff/Hestuff - CONEX	1.908		. 59	_	1.130	182	835	670	495	332
75	t i z	776		0	2	16	•	•	e	1	· •
97	Triwall/Palletize - Expl	ı	1	. 1	i	i	ı	1	ı	i	1
77	ı	257,169	112,981	133,973	139,863	86,452	20,802	83,601	89,875	87,950	76,179
78	RORO	1	, '	, ;	1	1	, ;	1	1	1	1
79	Stuif/Unstuff C/V - Veh	88	7,138	14,484	17,325	12,208	4,710	ا	17,152	26,229	23,969
85	Mini Bridge	1	1	ı	68,	90′	,	10,351	, 37	, 65	1 1
ν : Σ	•	•	ı	ı	1		1	•	, '	I	
8 2	- V/W	182	1	1	ı	1	,	1	4,791	7,844	10,094
8	Stuff/Unstuff C/V - Reefer	1	!		1	:	-	3	•		
	Total Containerized Cargo	260,124	121,500	152,065	161,934	103,866	25,694	112,107	114,854	124,169	110,646
Total	1	1,262,624	1,029,199	846,227	819,729	640,503	154,870	639,684	735,156	650,417	571,485

Figure III-1. Floor layout of Building 601, 1st floor.

UP RIVER

BLDG 630 SEMI-PERMANENT LOADING PLATFORMS LOADING DOCKY OF BLDG 6027

A-6

Figure III-4. Loading platforms on east side of Building 602 (southward

roll-on/roll-off (RORO)

RORO operations are infeasible at Gulf Outport because of excessive tidal variations and the lack of available open-storage area. The nearest accessible RORO facilities are at the France Roads Terminal, located on the Inner Harbor Navigation Canal, north of Gulf Outport. This facility has one stern-loading RORO knuckle, with access from the north and south sides; therefore, it can handle two RORO ships at once. The south side of the knuckle can accommodate any RORO ship in existence today. The north side of the knuckle is very low to the water and can accommodate only smaller size RORO vessels (300 to 400 feet long), which could tie up to mooring clusters. This facility is illustrated in figures III-6 and III-7.

personal property

Personal property operations at Gulf Outport are divided into POV and household goods categories.

These operations fall under the direction of the Cargo Operations Division.

privately owned vehicles. Povs are handled in either breakbulk or container operations. The following matrix provides condensed information in MTON of POVs processed through Gulf Outport in FY 79 and FY 80:

Total	97, 196	88,255
Container	26,229	23,969
Breakbulk	70,967	64,286
Year	FY 79	FY80

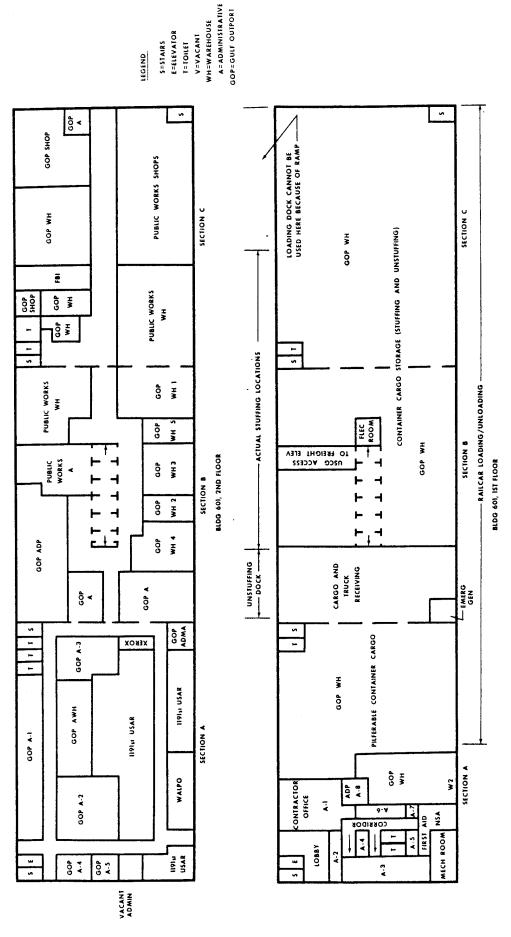


Figure III-5. Layout of container stuffing warehouse.

RORO berth at France Roads Terminal (northward view). Figure In.

As can be seen, breakbulk handling of POVs is considerably higher than containerization.

dock area on the city side of Building 630. When more vehicles are inspected on the loading dock on the west et Buildings 601 (west side) and 602 (east side) can be covered inspection station for POV operations. After teries are disconnected, and pilferable items are restuffing positions are needed, the loading dock areas side of Building 601. Currently, Gulf Outport has no destination, for export (fig III-9). POVs exported by When personnel turn in POVs for shipment overseas, they report to the POV processing office on the first inspection, POVs to be shipped overseas are moved in front of Building 601. During inclement weather, to shipment, they are moved through the processing containers are stuffed into containers at the loading to the staging area adjacent to Building 623. Prior Vehicles are inspected, for preshipment condition, line (Building 623), where the fuel is drained, batmoved (fig III.8). The POVs are then staged, by floor of Building 601, adjacent to Second Street.

Import POV operations are the reverse of export operations. When Gulf Outport is notified by a customer that he/she will be arriving to pick up his/her POV, 1 or 2 days prior to pickup, the POV is moved to the overflow staging lot north of Building 601.

Export POV shipments have been gradually declining over the past several years, while import shipments are up. This is clearly shown in table III-2, which lists shipments handled at Gulf Outport for 1978 through 1980. The yearly peak is seen to occur in

the July to November time frame. During these peak months, the overflow staging area north of Building 601 is usually needed.

At times, POVs are shipped by rail to Gulf Outport. These POVs usually arrive on multilevel railcars and are unloaded on the western side of Building 601. Most POVs arriving this way are imports from Hawaii, which are offloaded on the west coast and then shipped by rail to Gulf Outport. A listing of POV rail shipments to Gulf Outport is shown in table III-3. As can be seen, the peak influx is again during the summer months, with 63 percent arriving from May through September.

household goods. HHG moved through Gulf Outport make up about 12 percent of all breakbulk cargo handled. HHG are staged according to their point of destination (POD), loaded, and exported with other compatible cargo. Export HHG are essentially treated the same as any other breakbulk cargo.

Import HHG are unloaded from a vessel and stored in sections 47 to 53, 64 to 68, and 73 to 77 of Building 630. Storage-in-transit (SIT) HHG taken out of containers are staged on the first floor of Building 602, where they await loading and pickup by commercial carrier. Prior to loading, the Freight Traffic Division, which maintains overall control of import HHG, prepares Government bills of lading for each shipment, to be given to the carrier at the time of pickup. HHG for long-term storage (nontemp) are not stored at Gulf Outport, they are turned over to the Navy for storage.

Figure III-8. Processing line for POV cargo operations (Building 623),

TABLE III-2

		•				
Month	1978	1979	1980	1978	1979	1980
January	247	494	307	264	284	341
February	238	281	270	313	247	268
March	268	346	317	289	305	346
April	304	322	343	252	303	297
Мау	413	494	415	284	274	326
June	480	616	433	338	498	472
July	572	286	135	350	529	627
August	631	597	412	504	689	515
September	434	312	285	364	398	514
October	361	316	192	408	456	549
November	363	294	255	337	343	377
December	425	308	292	370	372	390
Total	4,736	4,966	4,023	4,078	4,698	5,022

Except for FY 78, the movement of HHG through Gulf Outport has remained relatively constant over the last 4 years. A listing of recent shipments of HHG moved through the terminal is shown in table III-4.

	1980
	Z
	BY RAIL
m	ΒX
'TABLE III-3	ARRIVING
	SHIPMENTS
	POV

	Month	Number of Shipments	Number of Railcars	Number of POVs	Percent of Total Number of POVs
J.	January		0	0	0
<u></u>	February	0	0	0	0
Ξ	March	3	ស	29	13.7
∢	April	61	2	27	5.5
Σ	Мау	2	4	63	12.9
ר.	June	7	9	64	13.1
<u> </u>	July	ທ	S	7.3	15.0
∀	August	2	2	29	5.9
· · · · · ·	September	٣	œ	7.8	16.0
<u> </u>	October	. 1	2	20	4.1
z	November	7	3	33	8.9
Ω	December	5	۳ļ	34	7.0
	Total	24	40	488	100.0

111-16

PORT	Total	2,214	1,217	1,049	1,193	799	1,147	954	584	1,147	1,714	1,580	889	14,487
TABLE III-4 GOODS MOVED THROUGH GULF OUTPORT DURING FISCAL YEAR 1980	oer of Shipments Import	1,572	988	748	937	514	880	108	352	922	1,484	1,140	769	10,840
TABLE HOUSEHOLD GOODS MOVED DURING FISCA	Number Export	642	331	301	256	285	267	246	232	225	230	440	192	3,647
ООН	FY 80	October	November	December	January	February	March	April	Мау	June	July	August	September	Total



MILITARY TRAFFIC MANAGEMENT COMMAND GULF OUTPORT 4400 DAUPHINE STREET NEW ORLEANS, LOUISIANA 70146-6000

5190 5191 DEPUTY COMMANDER
MTEA-GUL-DC
LCDR DONALD M. GIORDANO, SC. USN. COMMANDER
MTEA-GUL-C
LTC PATRICK A PARKER

AREA CODE (504) 948-XXXX (504) 942-6XXX AUTOVON 363-XXXX OPERATOR ASSISTANCE 363-5011 STAFF DIRECTORY AREA CODE

	-			SUPPORT STAFF	STAFF	
	L,_					
	ADMINISTRATION DIVISION MYEA-GUL-AD AD	AD AD AD	1407	CONTRACT ADMINISTRATION OFFICE MTEA-GUL-CA 1301	OFFICE OF FACILITY ENGINEE MEA-GUL-EN	TY ENGINEE
	MS. EILEEN C. SMITH			IONE M FRANCIONI		>
	BUDGET ANALYST MS. CAROLYN V. PORTER	AD(F)	1207	CONTRACT ADMINISTRATOR 5292 MS. KATHLEEN R. DORAN	MOTOR VEHICLE OPERATOR MR. JOHNNY JACKSON	NO NO
	PROGRAM ANALYST MR. IRVIN SMITH		6329	PURCHASING AGENT 1604 MR. LYLE B. MORRIS	TROUBLE SERVICE DISPATCHER MR. BOB SWAIN	PATCHER
	PERSONNEL LIAISON/ PA REP MS. LYNDA P. BLAIR	AD(P)	0969	·		
	RECORDS, FORMS, AND PUBLICATIONS VACANT	AD(S)	1219			
	MAIL CLERK MR. RAYMOND A. WILLIAMS, JR.	fS, JR.	6356			OPER
A-	PROPERTY BOOK OFFICER MR. SIDNEY P. MAILLOUX, III	AD(SU)	5238		TAGEO COCK	
-13	SUPPLY OFFICER MS. DIANA B. WEST		5338		CHIEF OP	UL-OP OP WEHR

6195

6196 5791

6

1654

SECURITY CONTRACT SERVICE REP MR. JAMES AVERY

MILITARY POLICE INVESTIGATOR SGT JIMMIE ATKINSON TRAINING NCO SGT(P) ANETONE U. SIMANU

9969 1654

5228

CPT PERRY A. GORSUCH

SAFETY & SECURITY DIVISION MTEA-GUL-SS

SPECIAL STAFF

6364

SAFETY & OCCUPATIONAL HEALTH SPECIALIST MR. GEORGE H. STRUNK

COMMANDS	SUBORDINATE
EQUIPMENT INSPECTOR MR. MARCUS MILLER	
POV 121 MS. SHERYL VAN SYCOC	
PERSONIAL PROPERTY TM(PE) 522 MS -: COUELINE MAYO	
CONTRACTOR PAYMENT 100 MS, JANE ORLOPP	WINSITE OP (WIN) 6150 MS. KATHLEEN G. BALLON (ALT) 1038
QUALITY ASSURANCE TM(QS) 521 MS. CAROLYN BREWER	OPERATIONS NCO 1124 SFC TERRY MOORE
IMPORT/EXPORT TM(DT) 113 MS. OLA MAE VIRGA	CARGO CONTROL 1116 MR. DAVID WARREN
TRAFFIC MANAGEMENT DIVISION CHIEF MR. WESTLEY A JACOMINO, JR.	CARGO OPERATIONS DIVISION MTEA-GUL-OP CHIEF OM MILLIAM LANDWEHR
STAFF	OPERATIONS

948 5283 948-1111 942-6770 948 1895

AIR FORCE WATERPORT LOGISTICS OFFICE (WPLO) EMERGENCY OPERATIONS CENTER (EOC) SECURE TELEPHONE UNIT (STU II) ID# 06052 MESSAGE RECEIVING RECORDER (NON DUTY HRS/WLEKENDS/ HOLIDAYS)

948-5258 948-5743 942-6902

FACSIMILE (DEX) MACHINES MTEA-GUL.TM MTEA-GUL.OP MTEA-GUL.C

FREQUENTLY USED NUMBERS

948-5188

GUARD OFFICE (AFTER DUTY HOURS) STAFF DUTY OFFICER (PAGING SERVICE)

948-1632 948-5127 948-1359

> ASSISTANT TERMINAL MANAGER MR. DIAGO DUQUE ASSISTANT ADMINISTRATOR MR. J.P. WRIGHT

TERMINAL MANAGER MR. THOMAS ARATA

RYAN-WALSH STEVEDORING CO., INC. TERMINAL SERVICES CONTRACTOR

5210

1001 5229 1218 1744

1126 1130

17	GRANITE CITY POV PROCESSING CENTER	EB
	CAPT LLOYD N. SOETERS	
0000	TRANSPORTATION SPECIALIST MS. JANIS L. GUFFEY	
438-3830 438-6880 432-4005	MOVEMENT SPECIALIST SSG JOHN LEONARD	
	AUTOVON 892 46064616 COM # (618) 452 46504651 DEX # 892 4654	1616 1651 1654
	CHARLES MELVIN PRICE SUPPORT CENTER BUILDING 400 GRANIF CITY II 62040-1801	H

8 SEPTEMBER 1989 THIS IS NOT AN OFFICIAL ORGANIZATIONAL CHAHT PUBLISHED BY MTEA-GUL AD(S)



APPENDIX B

NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

Form Approved UMB No. 158-S79016

	$\sqrt{1}$	13 14 15
IX. DESCRIPTION OF HAZARDOUS WASTES (continued from front)		The same of the same
A. HAZARDOUS WASTES FROM NON—SPECIFIC SOURCES. Enter the four—digit number from 40 waste from non—specific sources your installation handles. Use additional sheets if necessary.) CFR Part 261.31 for ea	ach listed hazardous
1 2 3 4 10 10 10 10 10 10 10 10 10 10 10 10 10	23 - 26	23 - 26 12 12 23 - 26 ed hazardous waste from
specific industrial sources your installation handles. Use additional sneets it necessary.		18
13 14 15 16 23 - 26 20 21 23 - 26 20 21 23 - 26 23 - 26 24 - 26 25 - 26 27 - 26 28 - 26 28 - 26 28 - 26 29 - 26 20 - 26 20 - 26 21 - 26 22 - 26 23 - 26 24 - 26 25 - 26 26 - 26 27 - 26 28 - 26	23 - 26 29 23 - 26	23 - 26 24 23 - 26 30 23 - 26
C. COMMERCIAL CHEMICAL PRODUCT HAZARDOUS WASTES. Enter the four—digit number fro stance your installation handles which may be a hazardous waste. Use additional sheets if necessary	m 40 CFR Part 261.33 f	
31 32 33 34 25 25 37 26 37 26 38 23 - 26 23 - 26 23 - 26 23 - 26 23 - 26	35 23 - 26 41 23 - 26 57	23 - 26 42 23 - 26 48 23 - 26
D. LISTED INFECTIOUS WASTES. Enter the four—digit number from 40 CFR Part 261.34 for each hospitals, medical and research laboratories your installation handles. Use additional sheets if neces	listed hazardous waste for sary.	rom hospitals, veterinary
49 50 52 52 23 - 26 23 - 26	23 - 26	23 - 26
E. CHARACTERISTICS OF NON-LISTED HAZARDOUS WASTES, Mark "X" in the boxes corresp hazardous wastes your installation handles. See 40 GFR Parts 261.21 - 261.24.)	onding to the characteris	stics of non—listed
1. IGNITABLE		□4. TOXIC 2000)
X. CERTIFICATION		
I certify under penalty of law that I have personally examined and am familiar with attached documents, and that based on my inquiry of those individuals immediately r I believe that the submitted information is true, accurate, and complete. I am aware t mitting false information, including the possibility of fine and imprisonment.	esponsible for obtain	ant penalties for sub-
SIGNATURE NAME & OFFICIAL TITLE (type or pr	int)	DATE SIGNED
PAUL R. JONES, FACILITIE	es manager	23 July 1980

1.4. - FOR OFFICIAL USE ONL

EPA Form 8700-12 (6-80) REVERSE

Not required primilary notification because hazardous wastes are not generated or transported by this organization.



ACKNOWLEDGEMENT OF NOTIFICATION OF HAZARDOUS WASTE ACTIVITY (VERIFICATION)

This is to acknowledge that you have filed a Notification of Hazardous Waste Activity for the installation located at the address shown in the box below to comply with Section 3010 of the Resource Conservation and Recovery Act (RCRA). Your EPA Identification Number for that installation appears in the box below. The EPA Identification Number must be included on all shipping manifests for transporting hazardous wastes; on all Annual Reports that generators of hazardous waste, and owners and operators of hazardous waste treatment, storage and disposal facilities must file with EPA; on all applications for a Federal Hazardous Waste Permit; and other hazardous waste management reports and documents required under Subtitle C of RCRA.

EPA I.D. NUMBER

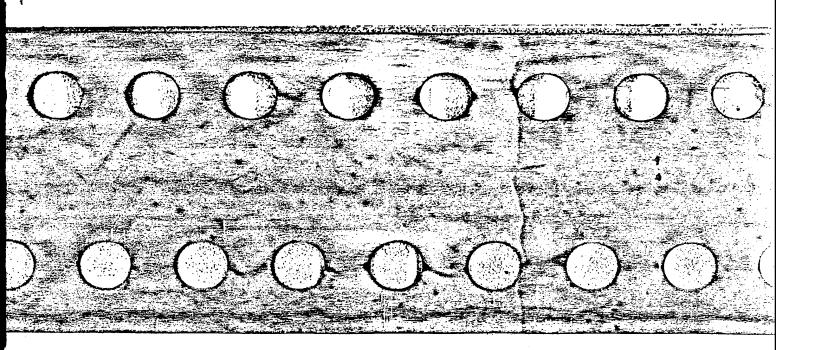
LA5-21-359-9314

U.S. ARMY MTMC GULF OUTPORT 4400 DAUPHINE STREET NEW ORLEANS, LOUISIANA 70146

INSTALLATION ADDRESS

4400 DAUPHINE STREET
NEW ORLEANS, LOUISIANA 70146

EPA Form 8700-12B (4-80)





APPENDIX C

REGISTRATION FOR UNDERGROUND STORAGE TANKS NEW ORLEANS MOT

(Nomice) 168E00647

REGISTRATION FOR UNDERGROUND STORAGE TANKS

STATE OF LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY OFFICE OF SOLID AND HAZARDOUS WASTE UNDERGROUND STORAGE TANK PROGRAM P.O. BOX 44274 BATON ROUGE, LA 70804-4274

RECEIVED BY STATEUSEONLY 180900 1.D. NUMBER 36 02 6015 APR 23 1986 TE RECEIVED 4/23/86 ′റ-**PATE CHECKED** D GROUND W. PROTECTION DIVISIONED BY

GENERAL INFORMATION

Registration is required by State and Federal law for all underground tanks that have been used to store regulated substances since January 1, 1974, that are in the ground as of May 8, 1986, or that are brought into use after May 8, 1986. The Information requested is required by the Louisiana Environmental Quality Act, L.R.S. 30:1051 et seq. as amended.

The primary purpose of this registration program is to locate and evaluate underground tanks that store or have stored petroleum or hazardous substances. It is expected that the information you provide will be based on reasonably available records, or, in the absence of such records, your knowledge, belief, or recollection.

Who Must Register? The Louisiana Environmental Quality Act, L.R.S. 30:1051 et seq. as amended. requires that, unless exempted, owners of underground tanks that store regulated substances must notify the Louisiana Department of Environmental Quality of the existence of their lanks. Owner means

(a) in the case of an underground storage tank in use on November 8, 1984, or brought into use

after that date, any person who owns an underground storage tank used for the storage, use, or dispensing of regulated substances, and (0) in the case of any underground storage tank in use before November 8, 1994, but no longer in use on that date, any person who owned such tank immediately before the discontinuation of its

What Tanks Are Included? Underground storage tank is defined as any one or combination of tanks that (1) is used to contain an accumulation of "regulated substances," and (2) whose volume (including connected underground piping) is 10% or more beneath the ground. Some examples are underground tanks storing; 1, gasoline, used oil, or diesel fuel, and 2, industrial solvents, pesticides, herbicides or furnigants

NOTE: Underground storage tanks of less than 500 gallon capacity, which are required to be registered by the Environmental Protection Agency, shall literates register with the state; however, these tanks are exempt from Louisians fees and regulations.

What Tanks Are Excluded? Tanks excluded from Louisiana registration are:

1. larm or residential tanks with a capacity of less than 500 gallons used for storing motor fuel for

- noncommercial ourposes:
- tanks used for storing heating oil for consumptive use on the premises where stored;
- ppeline facilities (including gathering lines) regulated under the Natural Gas Pipetine Safety Act of 1968, or the Hazardous Liquid Pipeline Safety Act of 1979, or which is an intrastate pipeline facility regulated under State laws:

- surface impoundments pits, ponds, or lagoons storm water or waste water collection systems; flow-through process tanks;

- 8. liquid traps or associated gathering lines directly related to oil or gas production and gathering
- 9. storage tanks situated in an underground area (such as a basement, cellar, mineworking, drift, shaft, or tunnet) if the storage tank is situated upon or above the surface of the floor

What Substances Are Covered? The registration requirements apply to underground storage tanks that contain regulated substances. This includes 1 any substance defined in section 101(14) of the Comprehensive Environmental Response. Compensation and Liability Act of 1980 (but not including any substance regulated as a hazardous waste under Subtritle C of the Solid Waste Disposal Act as amended by RCRA); and 2 i petroleum including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute.)

Where to Register? Completed registration forms should be sent to the address given at the top

When to Register? 1. Owners of underground storage tanks in use or that have been taken out of operation after January 1, 1974, but still in the ground, must register by May 8, 1986, 2, Owners who bring underground storage tanks into use after May 8, 1986, must register within 30 days of bringing the tanks into use.

- Registration Fee: The owners of operational or non-operational underground storage tanks containing regulated substances must submit with the registration form the payment of the registration fee for each underground storage tank according to the tolkowing schedule 1. For any substance defined in the Comprehensive Environmental Response. Compensation and Liability Act of 1980 (but not including any substance regulated as a hazardous waste under Subtitle C of the Solid Waste Disposal Act as amended by RCRAI—25 00 per tank.

 2. For petroleum, including crude oil or any fraction thereof which is liquid at standard conditions.
- of temperature and pressure (60 degrees Fahrenheit and 14-7 pounds per square inch absolute) -\$15 00 per tank

In no case shall one owner be required to pay an aggregate registration lee in excess of one thousand dollars (\$1,000,00). In addition to the registration fee, an annual monitoring and maintenance fee is required commencing May 8, 1987 in accordance with the regulations.

Penalties: Any owner who knowingly laits to register or submits laise information shall be subject to a civil penalty not to exceed \$25,000 per day for each tank for which registration is not given or for which false information is submitted.

INSTRUCTIONS

Please type or print in ink all items except "signature" in Section V. This form must be

completed for each location containing owned at this location, photocopy the reve Make checks payable to the Louisiana (erse side, and staple continuation	on sheets to this form.	ndicate number of ontinuation sheets ttached				
I. OWNERSHIP OF T	ANK(S)	II. LOCATION OF TANK(S)					
Owner Name (Corporation, Individual, Public Agency, or Other Entity) MTMC_GULF_OUTPORT		(If same as Section 1, mark box here [X]) Facility Name or Company Site Identifier, as applicable					
Street Address 4400 DAUPHINE STREET			o learning, as appreciate				
Parish ORLEANS		Street Address or State Road, as applicable					
City State NEW ORLEANS LOUISIA		Parish					
Area Code Phone Number (504) 942-6196		City (nearest)	State Zip Code				
Type of Owner (Mark all that apply ⊠)		Latitude:°(deg	.)((min)((sec.)				
Current State or Local G	ov't. Private or Corporate	Longitude:°(deg	.)(min.)"(sec.)				
Federal Gov t. [] Former [] (GSA facility I.D	Ownership uncertain	Indicate number of tanks at this location	Mark box here if tank(s) are located on land within an Indian reservation or on other Indian trust lands				
III. CONTACT PERSON AT TANK LOCATION							
Name (If same as Section I, mark box here	e 🗍) Job Title		Area Code Phone Number				
MICHAEL A. ARNONE	Supervisory Civil E	Engineer Technician	(504) 942-6196				
IV. TYPE OF REGISTRATION							
Mark Box here only if this is an amended or subsequent registration for this location.							

V. CERTIFICATION (Read and sign after completing Section VI.)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true. accurate, and complete.

Name and official title of owner or owner's authorized representative

Signature 1. Chron Date Signed

CONTINUE ON REVERSE SIDE

VI. DESCRIPTION OF UNDERGROUND STORAGE TANKS (Complete for each tank at this location.)							
Tank Identification No. (e.g., ABC-123), or Arbitrarily Assigned Sequential Number (e.g., 1,2.3)	Tank No.	Tank No.	Tank No.	Tank No.	Tank No.		
1. Status of Tank (Mark all that apply ⊠) Temporarily Out of Use Permanently Out of Use Brought into Use after 5/8/86	16699	16700	1670		1600		
2. Age (Years)	Approx 6 Yrs.	Approx 6 Yrs.	Approx. 6 Yrs.		Approx. 40 Yrs.		
3. Total Capacity (Gallons)	1000	1000	1000		1000		
4. Is Tank and/or Piping Leaking? (YES or NO)	NO	NO ·	NO		NO		
5. Material of Construction (Mark one ⊠) Steel Concrete Fiberglass Reinforced Plastic Unknown Other, Please Specify							
6. Internal Protection (Mark all that apply ⊠) Cathodic Protection Interior Lining (e.g., epoxy resins) None Unknown Other, Please Specify							
7. External Protection Cathodic Protection (Mark all that apply ⊠) Painted (e.g., asphaltic) Fiberglass Reinforced Plastic Coated None Unknown Other, Please Specify							
Rigid Metal Conduit 8. Piping Bare Steel (Mark all that apply ⊠) Galvanized Steel Fiberglass Reinforced Plastic Cathodically Protected Unknown Other, Please Specify	80000	8000	8000				
9. Substance Currently or Last Stored in Greatest Quantity by Volume (Mark all that apply ☑) Casoline (including alcohol blends) Used Oil Other, Please Specify c. Hazardous Substance Please Indicate Name of Principal CERCLA Substance OR Chemical Abstract Service (CAS) No. Mark box ☑ if tank stores a mixture of substances d. Unknown							
10. Additional Information (for tanks permanently taken out of service) a. Estimated date last used (mo./yr.) b. Estimated quantity of substance remaining (gal.) c. Mark box ⊠ if tank was filled with inert material (e.g., sand, concrete)			4				
11. Additional information (for replacement tanks installed after January 1, 1974)							
a. Is the tank currently in use a replacement tank for one previously in use at the same site? (YES or NO) b. When was the previous tank removed? (mo./yr.)	NO IN /80s	NO IN/ 80s	NO IN / 80s		NO		
c. What was the age of the previous tank at time of removal? (years) d. Was the tank and/or piping previously removed found to be leaking? (YES or NO)	Approx. 740 Yrs	YES	YES YES				
e. If so, was contamination of the regulated substance removed from the soil and/or ground water? (YES or NO)	YES	YES	YES				



DEPARTMENT OF THE ARMY

MILITARY TRAFFIC MANAGEMENT COMMAND

GULF OUTPORT

4400 DAUPHINE STREET, BUILDING 601-A NEW ORLEANS, LOUISIANA 70146-6000

April 22, 1986

Office of Facility Engineer

SUBJECT: Registration for Underground Storage Tanks

RECEIVED BY

Louisiana Department
Environmental Quality
Office of Solid & Hazardous Waste
Underground Storage Tank Program
Post Office Box 44274
Baton Rouge, Louisiana 70804-4274

APR 23 1986

GROUND WATER PROTECTION DIVISION

Dear Sirs:

As required by your agency, Form for Registration for Underground Storage Tanks has been completed and is submitted for processing. Purchase Order No. DAHC21-86-M-4122 is enclosed to cover fees.

MTMC Gulf Outport has four 1000-gallon underground storage tanks used for petroleum products.

If there should be any questions, point of contact this Command is Michael J. Jambois, telephone (504) 942-6195.

Sincerely,

Michael A. Arnone

Chief, Office of Facility Engineer

lickal a. Chrone

Enclosures

Copy Furnished:

MTMC, Eastern Area, ATTN: MTE-LOE MTMC, Western Area, ATTN: MTW-ENG

	all with teams a										
ine vedenall an	er les, et vations all		Deco	EST FOR QUO	TATION	¢ MO ^{LOS}			,	٠.,	PAGEL NOP
CHECKED ."	I A TOTAL TO				OF THIS O		tale Up	4	in the ♥X + C.P.		
PAX 15'11.	ORDER FOR SUPPLIES OR SE	RVICES	RETURN				Taran s		in orangine Sumik ah ar		5 CERTIFIED FOR NA
APPLIES			(THIS I	S NOT AN ORDE	R. See DD	Form 1153	5r)				TIONAL DEFENSE UNDER
1. CONTRACTIPUI	ACH ORDER'NO. 2. DELIVERY	ORDER NO.		3 DATE OF ORDE	R	4. REQUIS	ITION/PU	RCH RE	QUEST NO		DMS REG 1
15 4 15 911	The second second	J. Carlot		86 MAR	19	W42	V L'À	6078	-0003		00
DA11021-		7744		MINISTERED BY			CODE	70.0			8 DELIVERY FOR
6. ISSUED BY:	AND LONG TO SECOND	W42V	AC / AL	MINISTERED BT	II GINEF IF	ion b).	COOL	L			 _
Contrac	t Administration of the	ine .		-							DEST
Marian de	olf Outros	7 1 2									OTHER
1 4 55 73	The late of the same of the sa	是"结果"	1	49	,				•		
	suphine Street										(See Schedule if other)
New Orl	Leans, LA 70146-6000										
9. CONTRACTOR/	QUOTER! CC	LO75	2	FACILITY CODE	16	01	10. DELF	VER TO	FOR POINT BY		11 CHECK IF BUSINESS IS
	•			4					T 011		SMALL
į	Louisiana Dept.	of Royal room	ment=1	Duality.			27	K BE	LAPH		SMALL
l							12. DISC	OUNT TE	RMS		DISADVANTAGED
NAME AND .											WOMEN-OWNED
	Underground Stor	age Tank P	TOGIAM			•		XXI			
	P.O. Box 44274						13. MAIL	INVOIC	ES TO:		
-	Baton Rouge, LA	70804-427	4	.			5 C	OPLE	S - KRE	BLOC	X #15
				<u>*</u>				T.	• •		
14, SHIP TO:		ODE .		AYMENT WILL BE			CODE				4
Commend			M	TMC Resty	ern A	res		•			MARK ALL PACKAGES AND
METHIC GE	alf Outport	•	A.	TIN: MI	S-RMF	-P&E			-		PAPERS WITH CONTRACT OR
	auphine Street		M	ILITARY	CKAW	TREM	THAT.		₩		ORDER NUMBER
				1.		7002-			. 15		1
MEM OLI	Leans, LA 70146-6000		15	ayonne, l	10 U	, WZ-	JJU2		<u> </u>		1
16.	This delivery order is subject to instr	ructions contained on t	this side of fo	rm only and is issu	ed on ano	ther Govern	ment age	ncy or i	n accordance with	and subj	ect
DELIVERY	to terms and conditions of above nur						-		•		
DELIVERY	Reference your					furnish the	Collowing	on ter	ns specified herein	, includir	ng, (or U.S. purchases.
PURCHASE	-						-	_	_	Α.	i da Tirkin da 👝 d
!	General Provisions of Purchase Order	on DD Form 1155r	(EXCEPT CL	GAUSE NO 12 A	PPLIES C	ONLY IF	THIS BO	x L	IS CHECKED.	AND NO	0. 14 Д ТЫДЗ ВОХ
IS CHECKED); 1	pecial provisions					; and delive	ery as ind	icated. 7	This purchase is ne	gotiated :	under authority of
B .	 or as specified in the schedule if within the 	U.S., its possessions of	or Puerto Rico	, if otherwise unde	r 2304(a)(6).		•		٠.	्राम्बद्धीकानुतर्भन्ति
I	Additional General Provisions apply; Supplier s						copies.				•
	AND APPROPRIATION DATA/LOCAL USE										
	107 N351 35 CVB 113										
	992.0351 35 S28 113										
	5100 - 60705 - 581										
1601 -	5100 - 60705 - 581					20		21	22		23
1601 -	5100 - 60705 - 581	JLE OF SUPPLIES SERV	VICES			QUAN	RED/	21 UNIT	22.	E	23 AMOUNT
1601 -	5100 - 60705 - 581	JLE OF SUPPLIES/SEAV	//CES			QUAN	RED/	1	l .	E	
1601 -	5100 - 60705 - 581					QUAN	RED/	UNIT	UNIT PRIC		AMQUNT
1601	5100 - 60705 - 581			ORAGE TAN		QUAN	RED/	1	UNIT PRIC	.00	
1601 -	5100 - 60705 - 581 19. SCHEOU REGISTRATION FEE FOI	r undergroi	UND ST	ORAGE TAN		QUAN	RED/	UNIT	UNIT PRIC		AMQUNT
1601	5100 - 60705 - 581	r undergroi	UND ST	ORAGE TAN		QUAN	RED/	UNIT	UNIT PRIC		AMQUNT
1601	5100 - 60705 - 581 19. SCHEOU REGISTRATION FEE FOI	R UNDERGROU UGH 07 MAY	UND ST		iks,	QUAN	RED/	UNIT	UNIT PRIC		AMQUNT
1601	5100 - 60705 - 581 19. SCHEOU REGISTRATION FEE FOI	R UNDERGROU UGH 07 MAY	UND ST		iks,	QUAN	RED/	UNIT	UNIT PRIC		AMQUNT
1601	5100 - 60705 - 581 19. SCHEOU REGISTRATION FEE FOI	R UNDERGROU UGH 07 MAY	UND ST	orage tab	iks,	QUAN	RED/	UNIT	UNIT PRIC		AMQUNT
1601	5100 - 60705 - 581 19. SCHEOU REGISTRATION FEE FOI	R UNDERGROU UGH 07 MAY	UND ST		iks,	QUAN	RED/	UNIT	UNIT PRIC		AMQUNT
1601	5100 - 60705 - 581 19. SCHEOU REGISTRATION FEE FOI	R UNDERGROU UGH 07 MAY	UND STO 87.	VED B	iks,	QUAN	RED/	UNIT	UNIT PRIC		AMQUNT
1601	5100 - 60705 - 581 19. SCHEOU REGISTRATION FEE FOI	R UNDERGROU UGH 07 MAY	UND STO 87.		iks,	QUAN	RED/	UNIT	UNIT PRIC		AMQUNT
1601	5100 - 60705 - 581 19. SCHEOU REGISTRATION FEE FOI	r undergroi ugh 07 may R	UND STO 87. RECEI	VED B	iks,	QUAN	RED/	UNIT	UNIT PRIC		AMQUNT
1601	5100 - 60705 - 581 19. SCHEOU REGISTRATION FEE FOI	r undergroi ugh 07 may	UND STO 87. RECEI APR 2	VED B	rks. Y	QUAN	RED/	UNIT	UNIT PRIC		AMQUNT
1601	5100 - 60705 - 581 19. SCHEOU REGISTRATION FEE FOI	r undergroi ugh 07 may	UND STO 87. RECEI APR 2	VED B	rks. Y	QUAN	RED/	UNIT	UNIT PRIC		AMQUNT
1601	5100 - 60705 - 581 19. SCHEOU REGISTRATION FEE FOI	r undergroi ugh 07 may	UND STO 87. RECEI APR 2	VED B	rks. Y	QUAN	RED/	UNIT	UNIT PRIC		AMQUNT
1601	5100 - 60705 - 581 19. SCHEOU REGISTRATION FEE FOI	r undergroi ugh 07 may	UND STO 87. RECEI APR 2	VED B	rks. Y	QUAN	RED/	UNIT	UNIT PRIC		AMQUNT
1601	5100 - 60705 - 581 19. SCHEOU REGISTRATION FEE FOI	r undergroi ugh 07 may	UND STO 87. RECEI APR 2	VED B	rks. Y	QUAN	RED/	UNIT	UNIT PRIC		AMQUNT
16.01 18. 1TEM NO. 001	SCHEDURE REGISTRATION FEE FOR FROM 08 MAY 86 THROU	r undergroi ugh 07 may	ECEI APR	VED B	rks. Y	GUAN ORDE: ACCEP	RED/ TED ★	EA	UNIT PRIC	.00	AMQUNT
18. ITEM NO. OO1 *!/ quantity or as quantity or a	19. SCHEOU REGISTRATION FEE FOI FROM 08 MAY 86 THROU coepted by the Government is some dered, indicate by \sqrt{mark} . If	R UNDERGROUUGH 07 MAY	ECEI APR	VED B	rks. Y	GUAN ORDE: ACCEP	RED/	EA	25 TO 29	.00	60.00
1601 — 18. ITEM NO. OO1 * If quantity or as quantity or different, enter	REGISTRATION FEE FOR FROM 08 MAY 86 THROW THROW THE FOR FROM 18 MAY 86 THROW The completed by the Government is some dered, indicate by \(\sqrt{mark} \) if it is called quantity accepted before	R UNDERGROUGH 07 MAY	UND STORES OF AMERICA	VED B 23 1986 D WATER ON DIVISIO	iks. Y	GADE: ACCEP 4	MAR	EA	25 TO 29 DIF	.00	60.00
18. ITEM NO. OO1 *If quantity are as quantity or different, enter quantity order	REGISTRATION FEE FOR FROM 08 MAY 86 THROW THROW THE Government is some dered, indicate by \sqrt{mark. 1f} reducing quantity accepted before and encircle.	R UNDERGROUUGH 07 MAY	UND STORES OF AMERICA	VED B 23 1986 D WATER ON DIVISION DORAN	ON CONTE	QUADE ACCEP	MAR	EA	25 TO 29 DIE	.00	60.00
18. ITEM NO. OO1 *If quantity are as quantity or different, enter quantity order	REGISTRATION FEE FOR FROM 08 MAY 86 THROW THROW THE FOR FROM 18 MAY 86 THROW The completed by the Government is some dered, indicate by \(\sqrt{mark} \) if it is called quantity accepted before	R UNDERGROUGH 07 MAY	UND STORES OF AMERICA	VED B 23 1986 D WATER ON DIVISIO	ON CONTE	GADE: ACCEP 4	MAR	EA	25 TO 29 DIF ENG 30.	.00	60.00
*1/ quantity ac as quantity or order quantity order quantity order 26. QUANTITY IN	REGISTRATION FEE FOR FROM 08 MAY 86 THROWN ON MAY 86 THROWN OF THROWN ON MAY 86 THROWN OF THROWN ON MAY 86 T	R UNDERGROUGH 07 MAY R PRO 24 VAITED STATES BY KATHIL	APR & GROUND TECTION REN R.	VED B 23 1986 D WATER ON DIVISION DORAN	ON CONTE	GIADEI ACCEP 4 ACCEP	MAR	EA	25 TO 29 DIF ENG 30.	.00	60.00
18. ITEM NO. OO1 *If quantity are as quantity or different, enter quantity order	SCHEDULE SCH	R UNDERGROUGH 07 MAY R PRO 24 VAITED STATES BY KATHIL	APR & GROUND TECTION REN R.	VED B 23 1986 D WATER ON DIVISION DORAN 27 SHIP NO	ON CONTR	GIADEI ACCEP 4 ACCEP	MAR	EA	25 TO 29 DIF ENG 30, INI	TAL FER. CES	60.00
*1/ quantity ac as quantity or order quantity order quantity order 26. QUANTITY IN	REGISTRATION FEE FOR FROM 08 MAY 86 THROWN ON MAY 86 THROWN OF THROWN ON MAY 86 THROWN OF THROWN ON MAY 86 T	R UNDERGROUGH 07 MAY R PRO 24 VAITED STATES BY KATHIL	APR & GROUND TECTION REN R.	VED B 23 1986 D WATER ON DIVISION DORAN 27 SHIP NO	ON CONTR	ACCEP 4 ACCEP 4 ACCEP	MAR	EA	25 TO 29 DIF ENG 30, INI	TAL FER. CES	\$60.00
*1/ quantity ac as quantity or order quantity order quantity order 26. QUANTITY IN	SCHEDULE 19. SCHEDULE REGISTRATION FEE FOIL FROM 08 MAY 86 THROW FROM 08 MAY 86 THROW	PRO CONTORMS TO THE CO	GROUND STORES OF AMERICA	VED B 23 1986 D WATER ON DIVISION DORAN 27. SHIP NO	ON CONTR	ACCEP 4 ACCEP 4 ACCEP	MAR	EA	25 TO 29 DIF	TAL FER. CES TIALS	\$60.00
*1/ quantity ac as quantity or order quantity order quantity order 26. QUANTITY IN	REGISTRATION FEE FOR FROM 08 MAY 86 THROWN ON MAY 86 THROWN OF THROWN ON MAY 86 THROWN OF THROWN ON MAY 86 T	PRO CONTORMS TO THE CO	GROUND STORES OF AMERICA	VED B 23 1986 D WATER ON DIVISION DORAN 27 SHIP NO	ON CONTR	ACCEP 4 ACCEP 4 ACCEP	MAR	EA	25 TO 29 DIF	TAL FER. CES	\$60.00
18. ITEM NO. OO1 *If quantity are as quantity or different, enter quantity order. 26. QUANTITY IN INSPECTED	SCHEDULE 19. SCHEDULE REGISTRATION FEE FOIL FROM 08 MAY 86 THROW FROM 08 MAY 86 THROW	PRO CONTORMS TO THE CO	GROUND STORES OF AMERICA	VED B 23 1986 D WATER ON DIVISION DORAN 27 SHIP NO PARTIAL FINAL 31 PAYMENT	ON CONTR	ACCEP 4 ACCEP 4 ACCEP	MAR	EA	25 TO 29 DIF	TAL FER. CES TIALS	\$60.00
18. ITEM NO. OO1 *If quantity are as quantity or different, enter quantity order. 26. QUANTITY IN INSPECTED	REGISTRATION FEE FOI FROM 08 MAY 86 THROW THROW THE POINT OF AUTHORIZED GOVERNMENT OF AUTHORIZED	PRO CONTORMS TO THE CO	GROUND STORES OF AMERICA	VED B 23 1986 D WATER ON DIVISION DORAN 27. SHIP NO PARTIAL FINAL 31. PAYMENT COMPLETE	ON CONTE	ACCEP 4 ACCEP 4 ACCEP	MAR	EA	25 TO 29 DIF ENC 30. INIT 33. AM	TAL FER. CES TIALS FOUNT VE	\$60.00
1601 — 18. ITEM NO. 001 *If quantity or as quantity or different, enter quantity order 26. QUANTITY IN INSPECTED DATE 36. I certify this according to the second order.	SCHEDULE REGISTRATION FEE FOIL FROM 08 MAY 86 THROW FROM 08 MAY 86 THROW Gered, indicate by \squark. If r actual quantity accepted below and encircle. COLUMN 20 HAS BEEN: RECEIVED ACCEPTED AND EXCEPT AS NOTE SIGNATURE OF AUTHORIZED GOVE COUNT IS COFFECT and proper for payment.	PRO CONFORMS TO THE CO	GROUND STORES OF AMERICA	VED B 23 1986 D WATER ON DIVISION DORAN 27. SHIP NO PARTIAL SIL PAYMENT COMPLETE PARTIAL	ON CONTE	ACCEP 4 ACCEP 4 ACCEP	MAR	EA	25 TO 29 DIF ENC 30. INIT 33. AM	TAL FER. CES TIALS FOUNT VE	\$60.00
18. ITEM NO. OO1 *If quantity are as quantity or different, enter quantity order. 26. QUANTITY IN INSPECTED	REGISTRATION FEE FOI FROM 08 MAY 86 THROW THROW THE POINT OF AUTHORIZED GOVERNMENT OF AUTHORIZED	PRO 24 UNITED STATES BY KATHLE CONFORMS TO THE CO	UND STORES OF AMERICA S OF AMERICA REN R. DITTUE	VED B 23 1986 D WATER ON DIVISION DORAN 27. SHIP NO PARTIAL SIL PAYMENT COMPLETE PARTIAL FINAL	ON CONTE	ACCEP 4 86 RACTING/OI D.O. VOUC	MAR ROBERING CHERINO	EA OFFICE	25 TO 29 DIF EN 30. INI 33. AM 34. CH	TAL FER. CES TIALS FOUNT VE	\$60.00 \$60.00
# I/ quantity ac as quantity or different, enter quantity order 26. QUANTITY IN INSPECTED DATE J6. I certify this acc	SCHEDULE REGISTRATION FEE FOIL FROM 08 MAY 86 THROW FROM 08 MAY 86 THROW Gered, indicate by \squark. If r actual quantity accepted below and encircle. COLUMN 20 HAS BEEN: RECEIVED ACCEPTED AND EXCEPT AS NOTE SIGNATURE OF AUTHORIZED GOVE COUNT IS COFFECT and proper for payment.	PRO CONFORMS TO THE CO	UND STORES OF AMERICA S OF AMERICA REN R. DITTUE	VED B 23 1986 D WATER ON DIVISION DORAN 27. SHIP NO PARTIAL SIL PAYMENT COMPLETE PARTIAL	ON CONTE	ACCEP 4 86 RACTING/OI D.O. VOUC	MAR ROBERING CHERINO	EA OFFICE	25 TO 29 DIF EN 30. INI 33. AM 34. CH	TAL FER. CES TIALS FOUNT VE	\$60.00 \$60.00

DD FORM 1155

PREVIOUS EDITION C-3 SED UNTIL EXHAUSTED.

STANDARD FORM 36, JULY 1966 GENERAL SERVICES ADMINISTRATION FED. PROC. REG. (41 CFR) 1-16.101

CONTINUATION SHEET

REF. NO. OF DOC. BEING CONT'D. PAGE

3 3

NAME OF OFFEROR OR CONTRACTOR

ITEM NO.	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	MODIFY PURCHASE ORDER AS FOLLOWS:				
	Delete General Provision 3, Payments, in its ent	irety.			
	Substitute the following General Provision 3, In	voices:			
	(a) An invoice is a written request for payment ered or for services rendered. In order to be pr cable the following:				
measu of sh as th perso the c	(1) Invoice date. (2) Name of contractor. (3) Contract number (including order number r, contract description of supplies or services, re and unit price, and extended total. (4) Shipment number and date of shipment (Bipment will be shown for shipments on Government (5) Name and address to which payment is to at in the contract or on a proper notice of assig (6) Name (where practicable), title, phone n to be notified in event of a defective invoice, (7) Any other information or documentation ontract (such as evidence of shipment). Invoices adruplicate (one copy shall be marked, "Original")	quantity, ill of Lac Bills of I be sent onment). number and and required t shall be	ing adi whi ma y o	number and ng). ch must be tiling addresther provisipared and su	f weight he same s of ons of omitted
Payme by th the s payme	(b) For purposes of determining if interest beg nt Act (Public Law 97-177). (1) A proper invoice will be deemed to have e office designated in the contract for receipt o upplies delivered or services rendered has occurr (2) Payment shall be considered made on the nt is dated. (3) Payment terms (e.g. "NET 20") offered b d, "required payment dates", and (4) The following periods of time will not	ins to acc been rece f invoices ed. date on v	rue ive an hic	under the P d when it is d acceptance h a check fo	rompt received of r such
this date	a. After receipt of an improper invoic t or impropriety, but not to exceed 15 days (or a contract), and b. Between the date of a notice of any a proper invoice is received. When the notice is on the date shown on the notice."	ny lesser defective	per or	iod establis impropriety	hed by and the
			R	ECEIVED APR 23 1988	
			PRO	ROUND WATE	



APPENDIX D

CERCLIS LISTING FOR NEW ORLEANS

STREE HANGE STREET LEADER STREET LOCATION STREET LEADER STREET LEADE	4100 TOURO STREET 4100 TOURO STREET 15200 INTRACOASTAL DR 15200 INTRACOASTAL DR 11600 OLD GENTILLY 4031 JEFFERSON HWY 6699 FLORIDA AVE 1132 ELYSIAN FIELDS FLORIDA AVENUE 1135 ELYSIAN FIELDS FLORIDA AVENUE 1136 DE ARHAS ST 115 DE ARHAS ST 115 DE ARHAS ST 115 DE ARHAS ST 115 DE ARHAS ST 11600 OLD GENTILLY RD 11800 OLD GENTILLY RD 11800 OLD GENTILLY RD 11800 OLD GENTILLY RD 11900 AVENUE 1100 REBERT E. LEE BLVD 1100 EARHARD BLVO. 1100 EARHARD BLVO. 1100 FARMARD BLVO. 1
ALIGN CHANGE STREET ANDFILL A 1500 TOURG STREET A 1500 TOURG STREET ANDFILL A 1500 TOURG STREET A 1500 TOURG STREET A 1500 TOUR STREET A 1500 TOURG ST	15200 INTRACOASTAL DR NEW ORLEANS 15200 INTRACOASTAL DR NEW ORLEANS 11600 OLD GENTILLY 4031 JEFERSON HWY NEW ORLEANS 609 FLORIDA AVENUE 1115 DE ARNAS ST 1100 OLD GENTILLY RD 10200 OLD GENTILLY RD 10490 INTRACOASTAL DR NEW ORLEANS 1100 CHEF
A	15200 INTRACOASTAL DR NEW ORLEANS 11 HWY 406 ST JUSEPH C CONSTANCE ST NEW ORLEANS 11 1600 OLD GENTILLY NEW ORLEANS 0LD GENTILLY ROAD 6699 FLORIDA AVENUE 1315 FRANCE STREET 132 ELYSIAM FIELDS 135 FLORIDA AVENUE 135 FLORIDA AVENUE 135 FRANCE STREET 136 OLD GENTILLY RD NEW ORLEANS 13700 CHEF WENTELLY RD NEW ORLEANS 14800 INTRACONTILLY RD NEW ORLEANS 14800 OLD GENTILLY RD NEW ORLEANS 14800 OLD GENTILLY RD NEW ORLEANS 14800 INTRACONTILLY RD NEW ORLEANS 1500 CHEF WENTELLY RD NEW ORLEANS 1500 CHEF WENTELLY RD NEW ORLEANS 1500 CHEF WENTELLY HWY NEW ORLEANS 1500 CHEF WENTELLY RD NEW ORLEANS 1500 CHEF WENTELLY HWY NEW ORLEANS 1500 CHEF WENTELLY RD NEW ORLEANS 1500 CHEF WENTELLY RD NEW ORLEANS 1500 CHEF WENTELLY RD NEW ORLEANS 1500 COS WEYER AVE ALDO TO THE ORLEANS 1500 COS WEYER AVE AVE ALDO TO THE ORLEANS 1500 COS WEYER AVE AVE ALDO TO THE ORLEANS 1500 COS WEYER AVE AVE ALDO TO THE ORLEANS 1500 COS WEYER AVE AVE ALDO TO THE ORLEANS 1500 COS WEYER AVE AVE ALDO TO THE ORLEANS 1500 COS WEYER AVE AVE ALDO TO THE ORLEANS 1500 COS WEYER AVE AVE ALDO TO THE ORLEANS 1500 COS WEYER AVE AVE ALDO TO THE ORLEANS 1500 COS WEYER AVE AVE ALDO TO THE ORLEANS 1500 COS WEYER AVE AVE ALDO TO THE ORLEANS 1500 COS WEYER AVE AVE ALDO TO THE ORLEANS 1500 COS WEYER AVE AVE ALDO TO THE ORLEANS
ALCHER LANDELLE ALCHER LANDELLE ALCHER LANDELLE THOSO DE GENTILLY ALCHER LEGITINA CRANE REITAL THOSO DE GENTILLY AND GENTI	The constance of the constants 1600 OLD GENTILLY NEW ORLEANS 1600 OLD GENTILLY RD NEW ORLEA
ALL SEETTING CAME REITAL 11500 OLD GENTILLY NEED NOT NEED NEED NEED NEED NEED NEED NEED NEE	1100 000 000 0 CENTILLY NEW ORLEANS 4031 JEFFERSON HWY NEW ORLEANS 6699 FLORIDA AVENUE 6690 FLORIDA AVENUE
15 GENTING THE WITCHOUD ASSEMBLY FACILITY OLD GENTILLY ROAD OF GENTS AND OFFICE ASSEMBLY FACILITY OLD GENTILLY ROAD OFFICE ASSEMBLY ASSEMBLY FACILITY ROAD OFFICE ASSEMBLY FACILITY ROAD OFFI ASSEMBLY FACILITY ROAD OFFI ASSEMBLY FACILITY ROAD OFFI ASSEMBLY FACILITY FACILITY ROAD OFFI ASSEMBLY FACILI	4031 JEFFERSON HWY OLD GENTILLY ROAD 6.699 FLORIDA AVE 8.315 FRANCE STREET 8.315 FRANCE STREET 8.315 FRANCE STREET 8.315 FRANCE STREET 8.316 AND AVENUE 8.316 AND AVENUE 8.320 OLD GENTILLY RD 8.320 OLD GENT
SIGN CO. THE HICHOUR ASSEMBLY FACILITY OLD GENTILLY RADO SIGNATUR—FERSIS IND — LANDELL BEGONITIVE—FERSIS IND — LANDELL CITY OLD AVENUE CITY OF CENTRE CITY OF CHARLES CONDITIONAL OIL SERVICE OF LOUISIANA CITY OF CHARLES CONDITIONAL OIL SERVICE OF LOUISIANA CITY OF CHARLES CONDITIONAL OIL SERVICE OF LOUISIANA CITY OF CHARLES CONDITIONAL OIL SERVICE CONDITIO	0LD GENTILLY ROAD 6699 FLORIDA AVE. 6699 FLORIDA AVE. 6699 FLORIDA AVE. 6699 FLORIDA AVE. 6699 FLORIDA AVENUE 1132 ELYSIAN FIELOS 1132 ELYSIAN FIELOS 1135 DE ARHAS BLOS 1135 DE ARHAS BLOS 1135 DE ARHAS BLOS 1135 DE ARHAS BLOS 1136 DE ARHAS BLOS 1200 CHEF MENTEUR HWY 12
BOWNING-FERRIS IND - LANDFILL 6659 FLORIDA NEWE	6699 FLORIDA AVE. 6699 FLORIDA AVE. 6699 FLORIDA AVENUE 6699 FLORIDA AVENUE 6699 FLORIDA AVENUE 1132 ELYSIAN FIELOS 1113 ELYSIAN FIELOS 1115 DE ARHAS ST 1115 DE ARHAS ST 10200 OLD GENTILLY RD 10400 OLD GENTILLY RD 1040
SECOND SERVICE SERVI	6699 FLORIDA AVENUE 6699 FLORIDA AVENUE 1132 ELYSIAN FIELDS 1132 ELYSIAN FIELDS 1115 DE ARHAS ST
CONGANY TRUCK SERVICE	132 ELYSIAN FIELDS FLORIDA AVENUE 1115 DE ARMAS ST 10200 OLD GENTILLY RD 103800 OLD GENTILLY RD 10490 INTRAÇOASTAL DR 10490 INTRAÇOASTAL DR 10500 OLD GENTILLY RD 10600 OLD GENT
COMMINS COMM	115 DE ARHAS ST
115 OF ARMS ST	1115 DE ARHAS ST 10200 OLD GENTILLY RD CANAL STREET 13800 OLD GENTILLY RD 14800 OLD GENTILLY RD 15800 OLD GEN
GENTILLY LANDFILL	10200 OLD GENTILLY RD NEW ORLEANS CANAL STREET RANGE STREET ROOT SEGNTILLY RD NEW ORLEANS 13800 OLD GENTILLY RD NEW ORLEANS 14901 JEFFERSON HWY NEW ORLEANS 1500 GENHEYER AVE BLOG 101 NEW ORLEANS 2600 GENHEYER AVE BLOG 101 NEW ORLEANS 2600 GENHEYER AVE BLOG 101 NEW ORLEANS 2600 GENHEYER AVE BLOG 101 NEW ORLEANS
THOUSTRIAL CANAL ASSA, CORP. LIJUJID AIR CORP. ASSA, HARTITH ARRIETTA AEROSPACE 13000 OLD GENTILLY RD NEW ORLEANS NATIONAL DIL SERVICE OF LOUISIANA 14901 JEFERSON HWY RECOVERY I 10000 CHEF HENTEUN HWY 1000 CHEF HENTEUN 1000 CHEF HWY 1000 CHEF HWY 1000 CHEF HENTEUN 1000 CHEF HWY 1000 CHE	CANAL STREET P.O. BOX 26367 13800 OLD GENTILLY RD 13800 OLD GENTILLY RD 13800 OLD GENTILLY RD 14800 INTRACOASTAL DR 14800 INTRACOASTAL DR 1700 CHEF MENTEUR HWY 1700 CHEF MENTEUR HWY 1900 CHEF MENTEUR HWY 1900 CHEF MENTEUR 1900 CHE
LIQUID AIR CORP. 1404ID AIR CORP. NASA-HARTIN MARIETA AEROSPACE 14890 INTRACOASTAL DR NEW ORLEANS NATIONAL OIL SERVICE OF LOUISIANA 1490 INTRACOASTAL DR NEW ORLEANS RECOVERY I 17000 CHEF NEW FURTHER NEW ORLEANS SEAALL 17000 CAMPANY 1700 CAMPANY 1700 CAMPANY 1700 CAMPANY 1700 CAMPANY 1700 CAMPANS US NAVY NEW ORLEANS NAVAL SUPPORT ACTION 2600 GEN WEYER AVE BLOG 101 NEW ORLEANS US NAVY NEW ORLEANS NAVAL SUPPORT ACTION 2600 GEN WEYER AVE BLOG 101 NEW ORLEANS NEW ORLEANS NEW ORLEANS NEW ORLEANS NAVA NEW ORLEANS NAVA NEW ORLEANS NAVAL SUPPORT ACTION 2600 GEN WEYER AVE BLOG 101 NEW ORLEANS	P.0. BOX 26367 13800 OLD GENTILLY RD 13800 OLD GENTILLY RD 14800 INTRACOASTAL DR 14800 INTRACOASTAL DR 17000 CHEF MENTEUR HWY 17000 CHEF MENTEUR HWY 1000 ROBERT E. LEE BLVD 1100 ROBERT E. LEE BLVD 1000 ROBERT E.
NASA-MARTIN MARIETTA AEROSPACE 14990 INTRACOASTAL DR NEW ORLEANS RECOVERY 1 RECOVERY 1 RECOVERY 1 RECOVERY 1 17000 CHEF MENTEUR HWY NEW ORLEANS RECOVERY 1 17000 CHEF MENTEUR HWY NEW ORLEANS SEAT SIE SOUTHERN REGIONAL RESEARCH CENTER 1100 ROBERT E. LEE BLVD NEW ORLEANS SOUTHERN REGIONAL RESEARCH CENTER 1100 ROBERT E. LEE BLVD NEW ORLEANS US NAVY NEW ORLEANS NAVAL AIR STATION BLOG SO, COOP 70 US NAVY NEW ORLEANS NAVAL SUPPORT ACTION 2600 GEN HEYER AVE BLOG 101 NEW ORLEANS US NAVY NEW ORLEANS NAVAL SUPPORT ACTION 2600 GEN HEYER AVE BLOG 101 NEW ORLEANS	13800 OLD GENTILLY RD NEW ORLEANS 14890 INTRACOASTAL DR NEW ORLEANS 17000 CHEF MENTEUR HWY NEW ORLEANS 5EA 1 SLE 1100 ROBERT E. LEE BLVD NEW ORLEANS 1100 ROBERT E. LEE BLVD NEW ORLEANS 2500 GEN MEYER AVE AVE ALDG 101 NEW ORLEANS 2500 GEN MEYER AVE AVE ALDG 101 NEW ORLEANS
RECOVERY 1 SEA 1SEE SEA 1SEE SEA 1SEE SEA 1SEE SEA 1SEE NEW ORLEANS SEA 1SEE SOUTHERN REGIONAL RESERVE CENTER 1100 ROBERT E. LEE BLVD NEW ORLEANS US NAVY NEW ORLEANS NAVAL AIR STATION SEA 1SEE SEA 1SEE NEW ORLEANS NEW ORLEANS US NAVY NEW ORLEANS NAVAL SUPPORT ACTION 2600 GEN HEYER AVE ALCO 101 NEW ORLEANS NEW	14890 INIKACUASIAL DK NEW ORLEANS 17000 GEFFRSON HWY NEW ORLEANS 1864 ISLE 1100 ROBERT E. LEE BLVD NEW ORLEANS 1100 ROBERT E. LEE BLVD NEW ORLEANS 1700 EARHARD BLVD. 1600 GEN HEYER AVE ALDG 101 NEW ORLEANS 2600 GEN HEYER AVE ALDG 101 NEW ORLEANS
RHEEM HANUFACTURING COMPANY 1700 JEFFERSON HAY NEW ORLEANS SEATSTEEM HANUFACTURING COMPANY 1500 JEFFERSON HAY SCHALL SCHALL SEARCH CENTER 1100 ROBERT E. LEE BLVD NEW ORLEANS THOMPSON-HAYWARD CHEMICAL COMPANY 7700 RAHARD BLVO. US NAVY NEW ORLEANS NAVAL AIR STATION BLOG 50, COOE 70 NEW ORLEANS US NAVY NEW ORLEANS NAVAL SUPPORT ACTION 2600 GEN MEYER AVE BLOG 101 NEW ORLEANS US NAVY NEW ORLEANS NAVAL SUPPORT ACTION 2600 GEN MEYER AVE BLOG 101 NEW ORLEANS	1700 JEFFERSON HWY NEW ORLEANS SEA ISLE 1100 ROBERT E. LEE BLVD NEW ORLEANS 1100 ROBERT E. LEE BLVD NEW ORLEANS 7700 EARHARD BLVD. NEW ORLEANS BLDG 50, CODE 70 NEW ORLEANS 2600 GEN MEYER AVE BLDG 101 NEW ORLEANS
SEA ISLE HANDIAL INTING TORING TOTAL SEA ISLE BLVD NEW ORLEANS SOUTHERN REGIONAL RESEARCH CENTER 1100 ROBERT E. LEE BLVD NEW ORLEANS THOMPSON-HAWARD CHARICAL COMPANY 700 EARHAWARD CHARICAL COMPANY US NAVY NEW ORLEANS NAVAL AIR STATON 2600 GEN MEVER AVE DLOG 101 NEW ORLEANS US NAVY NEW ORLEANS NAVAL SUPPORT ACTION 2600 GEN MEVER AVE DLOG 101 NEW ORLEANS US NAVY NEW ORLEANS NAVAL SUPPORT ACTION 2600 GEN MEVER AVE DLOG 101 NEW ORLEANS	SET TELE BLVD NEW ORLEANS 1100 ROBERT E. LEE BLVD NEW ORLEANS 7700 EARHARD BLVO. 8 LDG 50, CODE 70 8 NEW ORLEANS 2600 GEN MEYER AVE BLDG 101 NEW ORLEANS
SOUTHERN RESEARCH CENTER 1100 ROBERT E. LEE BLVD NEW ORLEANS THOMPSON-HAYWARD CHEMICAL COMPANY US NAVY NEW ORLEANS NAVAL AIR STATION BLDG 50, CODE 70 US NAVY NEW ORLEANS NAVAL SUPPORT ACTION 2600 GEN WEYER AVE BLOG 101 NEW ORLEANS US NAVY NEW ORLEANS NAVAL SUPPORT ACTION 2600 GEN WEYER AVE BLOG 101 NEW ORLEANS	1100 ROBERT E. LEE BLVD NEW ORLEANS 7700 EARHARD BLVO. 8LDG 50. CODE 70 NEW ORLEANS 2600 GEN MEYER AVE BLDG 101 NEW ORLEANS
THOMPSON-HAYWARD CHEMICAL COMPANY 7700 EARTARD BLVD. US NAVY NEW ORLEANS NAVAL AIR SIATION BLOG 50, CODE 70 NEW ORLEANS US NAVY NEW ORLEANS NAVAL SUPPORT ACTION 2600 GEN MEYER AVE BLOG 101 NEW ORLEANS NEW ORLEANS NEW ORLEANS NEW ORLEANS	A 700 EARHARD BLVD. BLDG 50. CODE 70 NEW ORLEANS 2600 GEN MEYER AVE BLDG 101 NEW ORLEANS
US NAVY NEW ORLEANS NAVAL AIR STATION BLOG 50, CODE 70 NEW ORLEANS US NAVY NEW ORLEANS NAVAL SUPPORT ACTION 2600 GEN HEYER AVE RLOG 101 NEW ORLEANS NEW ORLEANS NEW ORLEANS NEW ORLEANS NEW ORLEANS	2600 GEN HEYER AVE ALDG 101 NEW ORLEANS
US NAVY NEW ORLEANS NAVAL SUPPORT ACTION 2600 GEN MEYER AVE BLOG 101 NEW ORLEANS	2600 GEN HEYER AVE PLDG 101 NEW ORLEANS
	;.
D-1	D-1



APPENDIX E

REGISTERED WELLS WITHIN ORLEANS PARISH (EXCERPTS)



LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

P.O. Box 94245, Baton Rouge, Louisiana 70804-9245

(504) 379-1434

NEIL L. WAGONER, P.E. SECRETARY

November 8, 1989

BUDDY ROEMER GOVERNOR

Mr. Tim Farrell Roy F. Weston, Inc. Goshen Office Weston Way West Chester, PA 19380

Re: Water Well Listing
User Supplied Coordinates
N 30 00' 00"; S 29 57' 00"
E 90 01' 00"; W 90 05' 00"
Orleans Parish

Dear Mr. Farrell:

As per your request of October 30, 1989, we are herewith enclosing the following for your information:

- 1) A computer printout listing registered water wells and pertinent information about the wells
- 2) An explanation of the codes used on the printout
- 3) A library copy of W.R. Bulletin No. 9
- · 4) A library copy of W.R. Basic Records Report No. 11
 - 5) A library copy of G.S. Water-Supply Paper 1296

Please be advised that this list does not include every possible water well which may have been drilled within the above-referenced coordinates. The list represents only those wells which have been registered with this Department or scheduled by the U.S. Geological Survey and does not include those which are presently being processed.

These library copies of reports are loaned to you on the condition that they be returned to this Department as soon as possible.

Mr. Timothy M. Farrell November 8, 1989 Page - 2 -

This information is made available through our cooperative water resources program with the U.S. Geological Survey.

If we may be of any further assistance, please do not hesitate to contact this office.

Very truly yours,

Z. "Bo" Bolourchi, P.E.

3. Folourch

Chief, Water Resources Section

ZB:cec ATTACHMENT

WELL2071	REGISTERED WATER	ER WELLS IN ORLEANS	S	PARISHWITHIN	GIVEN C	COORDINATES		PAGE	-
11/07/89 NORTH- 300000 SOUT IDENTIFICATION NUMBER	11/07/89 NORTH- 300000 SOUTH- 295700 EAST- 900100 IDENTIFICATION OWNERS NAME WELL NUMBER	WEST - 900 DWNERS R NUMBER	500 WELL DEPTH	WELL USE	SUB USE C	DATE	PUMPING AV RATE(GPD) INF	AVAILABLE Information	
		ER-	NEW ORLE	-GONZALES-NEW ORLEANS AQUIFER	! ! !	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
295705090041601	HIBERNIA BANK	-	757 A	ABANGONED	;	0138		0	
285705090041603	HIBERNIA BANK	. 2	748 0	DTHEŘ	7-	0138		U	
295718090040901	D H HOLMES CO		750 A	ABANDONED	1	0139		U	
295830090041201	JOSEPH WADDELL *	9 .	003	ABANDONED	:	0125		v	
295723090034601	JACKSON BREW CO	7	175	ABANDONED	ŧ	0101			
295722090034701	JACKSON BREW CO -	8	I 111	INDUSTRIAL	66	0140	·	۰	
295723090041501	N O ATHLETIC CL		785 F	PUBLIC SUPPLY ABANDONED	<u> </u>	1040 6108		ပ ပ	
		12		INDUSTRIAL	66	0733		ပ	
295715090044601	81	- 24		ABANDONED	1			٥	
286827090013801	FLINTKOTE GO -			TNDUSTRIAL	6	0138		3.80	
295907090013101	U S ARMY -	4	728 /	ABANDONED	:	0642		ר כ ר	
295929090013501	PORT OF NEW DRL . 46 D H HOLMES CD - 49	46	700 . 758 .	ABANDONED OTHER	: 7	0543 0650		ר פ	
295828090013801	FLINTKOTE CO	52	730	INDUSTRIAL	66	0746		r c	
295823090014001	FLINTKOTE CO	53 54	756	OTHER	n- 68	0747			
295721090040402	AMERICAN BREW			ABANDONED	-	0147		ပ	
295718090040902	D H HOLMES CO SCHWEGMANN BROS		750	ABANDONED INDUSTRIAL	1 9	0147		9 1	
295828090014201				INDUSTRIAL	66	0257		ر د	
295855090012561	BULK TRANSPORT	- 118 - 120	725	INDUSTRIAL ABANDONED	86	0759 0154		-	
295844090014101	LONE STAR CEMEN -	- 129	726	INDUSTRIAL	66	0551		-	
295738080021001	REUTHER SEAFGOD	- 130	736	PUBLIC SUPPLY	Ç	0357			

WELL2071	REGISTERED	WATER WELLS	S IN ORLEANS	PARISHWITHIN	GIVEN COORDINATES	VATES	PAGE	8
11/07/89 NORTH-300000 SDUTH IDENTIFICATION NUMBER	H- 295700 EAST- 900 100 DWNERS NAME NELL NEMBE	æ	VEST- 900500 DWNERS WELL NUMBER DEPTH	WELL USE	SUB DATE USE COMPLETED	PUMPING AVAILA Rate(GPD) Informa	BLE	
295705090041603	HIBERNIA BANK	- 131	1 750	OTHER	-5 0256			
295727090043601	JUNG HOTEL V A HOSPITAL	- 133	775	OTHER OTHER	-u 0148 -u 0362	3 A		
295958090040301	LA PUBLIC WORKS	- 192	620	TEST HOLE	PA 1975	EL C		
295648090014001 295738090020701	DIXIE PLASTICS REUTHER SEAFUDD	- 184 - 211	700 2 745	INDUSTRIAL INDUSTRIAL	89 0768 20 0484	L 84000 LD		
TOTAL NUMBER OF RE	REGISTERED WATER WELLS BY AQUIFER	ILLS BY AQU	IFER CODE	31				
285813090022801	AMOCD PROD CD	AQUIFERA -50382		BUIFER CODE NOT ASSIGNED	9890	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	3	
295813090022802	AMOCO PROD CO	-50392	2 13	MONITOR	9890		3	
295813090022803 295744090011504	AWOCO PROD CO TENNECO	-50402	3 13 B-4 13	MONITOR MONITOR	0686 0585	1	3	
295744090011501	TENNECO	-50592	B-1 12	MONITOR	0585			
296744090011502 295744090011503	TENNECO TENNECO	-50602	B-2 12 B-3 12	MONITOR MONITOR	0585 0585			
295746090045501	TENNECO	-50702	8-1 12	MONI TOR	0585			
295746090045502 295746090045503	TENNECO TENNECO	-50712 -50722	B-2 12 B-3 12	MONITOR MONITOR	0585			
295746090045504	TENNECO	-50732	B-4 12	MONITOR	0585			
295803090010601 285803090010602	TENNECO Tenneco	-50742	B-1 12	MONITOR MONITOR	0585			
295803090010603	TENNECO	-50762	B-3 12	MONITOR	0585			
295803090010604 285923090032401	TENNECO AMOCO OIL	-50777	B-4 12	MONITOR MONITOR	0585 ** (096	1	3	
295923090032402	AMOCO OIL	-51232	2 2 3	MONITOR	1086		3	
295823080032403	AMOCO OTL	-51242	5	MONI TOR	1086	נ	2	

.ng\$ o	WELL2071 11/07/89 NORTH- 300000 SOUTH- 285700 EAST- BOOIDO	WATER WELLS	LS IN ORLEANS WEST - 900600	ANS 500	PARISHWI	-WITHIN GIVEN	COORDINATES	TES			PAGE	m .
er Street Grant Grant Street Grant Street	OWNERS NAME		OWNER	WELL	WELL USE	SUB	COMPLETED		PUMPING Rate(GPD)	AVATLABLE INFORMATION	ABLE	
	AMOCO OIL	-51252	4	13	MONITOR	1	1086			_	3	
	AMOCO DIL	-51262 -51272	- 2		MONITOR Monitor	1 1	1086				3 3	10000
	AMOCO OIL	-51282	က	Ξ	MONITOR .	1	1086			ب	3	
a gamatha is	AMOCO DIL AMOCO DIL	-61292 -51302	7	11	MONTTOR MONTTOR	1 1 1 1	1086				3 3	
	TEXACO	-52882	9-MM	ភិ	MONITOR	:	1188				3	
and the second	TEXADO TEXACO	-52892	E-7	t5 13	MONITOR	: :	1188			٠.	3	
	REG TRANSIT AUT	-52937	NW-1	4	MONITOR	;	0189					
	REG TRANSIT AUT REG TRANSIT AUT	+52942	N-2	* *	MONITOR MONITOR	1 1	0189			فت است		
	REG TRANSIT AUT	-52962	MW-4	7	MONITOR	i	0189			-1		
and the brokensel	REG TRANSIT AUT REG TRANSIT AUT	-5297Z -5298Z	K8	: :	MONITOR MONITOR	1 1	0189			ניי		- 27- 500 A
	TOC RETAIL	-53122	MW-1	12	MONITOR	1	0389			_	3	
5.70566.7775	TOC RETAIL TOC RETAIL	-53132	8-7K	01	MONITOR MONITOR	t 	0289			ي ي	> >	
	REGISTERED WATER WELLS BY AQUIFER	ILLS BY AQI	UIFER CODE		36		٠					
	NEW DRIEANS	AQUIFER		T SAND 1 753	700-FOBT SAND DF NEW ORLEANS ARE! 753 ABANDONED	AREA	1901	1	1	1		
	REGISTERED WATER WELLS BY AQUIF	ILLS BY AQI	UIFER CODE		•	•						
and the state of t	0041502 UNKKNOWN	AQUIFER	502004000000000	0T SAND 1248	1250-FBOT SAND OF NEV ORLEANS AREA 1248 DESTROYED	\$ AREA	1237			ن د د د د		
	N D ATHLETIC CL	- 161		1251	PUBLIC SUPPLY	1- ×	0861			EL		
iui.	TOTAL NUMBER OF REGISTERED WATER WELLS BY AQUIF	ELS BY AQ	UIFER CODE		2							1. 1.
i												•

\$101

	- 30508030000		2000000000	 			: *************************************	
7								
PAGE	Z							
4	AVAILABLE INFORMATION				*			
	78							
	₹ Z	1						
	2 2							
	PUMPING Rate(GPD)							
WITHIN GIVEN COORDINATES	0.0000000000000000000000000000000000000							
NIC	#5							
DORE	COMPLETED							
Z	ច							
IVE	SUB						•	
Z	57 =							
HI		2						
3	USE	-						
HS.								
PARISH	TIE	m N						
		\$2 L						
	ΗE	ERS-						
ANS	OOBOO WELL DEPTH	AQUIFERS HIN COOR						
ORLEANS	8 2 7	LL AQUIFERS						
Z	- 12 E	₹						
1	303	2						
WEL	Q - E	-AQUIFER						
TER	900100 VELL NUMBER	-AQUIF						
A A		719						
REGISTERED WATER WELLS	298700 EAST Dwners name	Œ						
IST	T X	I VA						
REG	88	250						
	S S	<u>u</u> +-						
	** * *********************************	TOTAL NUMBER OF REGISTERED WATER WE						
	* SOUTH	. L						
	. 11.	1 00 1 W						
	SCO ICA IBER							
170	9 H Z	2						
1,1207	NORTH- 300000 \$ IDENTIFICATION NUMBER	10						Prince of the last
WEL	- 9	Section (Co.)	1.51, 4444	 3470.00	 long Inport	.iniany2	No. Prospi	Jakede, N

EXPLANATION OF TERMS FOR THE COMPUTERIZED LISTING OF WATER WELLS AND HOLES WITHIN SPECIFIED COORDINATES

IDENTIFICATION NUMBER	-	This is a unique number that includes the latitude (first six numbers), longitude (second six numbers), and a sequential number which indicates the number of this well when other nearby wells have the same latitude and longitude.
REVISED COORDINATE	-	The top number is the identification number and the bottom number is the actual latitude and longitude of the well. (This is shown only if the identification number and the actual latitude and longitude are different).
OWNER'S NAME	-	Name of the individual, person, company or agency that owns or leases the well, and operates the well.
WELL NUMBER	-	Well Number, by parish, assigned by the U.S. Geological Survey and/or DOTD.
OWNER'S NUMBER	-	Well name or number assigned by the owner to identify each well.
WELL DEPTH	-	Depth of the well, in feet, measured from bottom of the screen to the ground surface.
WELL USE	-	Main use of the well.
WELL SUBUSE	-	Subuse of the well (see attached sheet).
DATE COMPLETED	-	The month and year the well was completed and/or accepted by the owner or lessee.
PUMPING RATE	-	Average daily pumping rate (GPD) as shown on the original registration form. A blank indicates the pumping rate is unknown.
AVAILABLE INFORMATION	-	Indicates available information as follows: E, geophysical log; L, drillers log; D, drill cuttings; C, chemical analysis; B, bacteriological analysis; P, pumping test; W, water level. Available information may be obtained from the DOTD, USGS, drilling contractor and/or other sources.

DOTD'S USE AND SUB-USE COMPUTER CODES FOR WATER WELLS AND HOLES

USE		SUB-USE ·
A	Abandoned	
В	Plugged	
C	Destroyed	
D	Dewatering	
E	Power Generation	
Н	Domestic	
I	Irrigation/Agriculture	
L	Heat Pump	H H hole H S supply well
M	Monitor	P A plugged
N	Industrial	<pre>2 0 Food and kindred products 2 2 Textile mill products 2 4 Lumber & wood products 2 6 Paper & allied products 2 8 Chemicals & allied products 2 9 Petroleum refining and related industries 3 3 Primary metal industries 9 9 Other</pre>
)	Observation	 O Multiple Purpose P Piezometer Q Water Quality W Water Level
P	Public Supply	- C Commercial - M Therapeutic - P Municipal - R Rural - T Institution/Government - Other
R	Recovery	·
3	Rig Supply	
Γ	Test Hole	P A plugged
	Other L:clj 18, 1986	- C Cathodic - F Fire Protection - I Inactive - R Reworked - S Standby - U Unknown - Z Other
		E-8

E-8



APPENDIX F

SPECIES SURVEY - NEW ORLEANS



Virginia Van Sickle

DEPARTMENT OF WILDLIFE AND FISHERIES LOUISIANA NATURAL HERITAGE PROGRAM

Buddy Roemer

P.O. Box 98000 Baton Rouge, LA 70898

8 November 1989

Tim Farrell
R. F Weston Co.-Goshen Office
Weston Way
West Chester, PA 19380

Dear Mr. Farrell:

As per your request of 3 November, we have examined our database for any known occurrences of rare, threatened or endangered species within 3 miles of the proposed military ship loading port at the junction of the Mississippi River Gulf Outlet and the main channel of the Mississippi River. We do not have any records of sensitive species near the project site; however, a thorough survey has, to our knowledge, never been conducted.

We also conducted a search of our database for any records of sensitive species within the Mississippi River channel (i.e., between the levees and within the delta) from New Orleans to the mouth of the river. We have two records of the pallid sturgeon (Scaphirhynchus albus) from the main channel. This species has been proposed for federal listing. We also have records of another apparently rare fish, the saltmarsh topminnow (Fundulus jenkinsi), from the deltaic marshes. Finally, there are at least seven waterbird nesting colonies in this stretch of the river, also in the deltaic marshes.

I have also enclosed a list of all vertebrates documented from Orleans Parish. Any of those species could potentially be found at the project site. Refer to the enclosed list of LNHP-listed species to determine if any sensitive species could possibly be found at the site.

I hope these data are useful. If we can be of any further assistance, do not hesitate to contact us at the above address or (504) 765-2821.

Sincerely,

Laupenter Gary Lester

LNHP-Coordinator

enclosures

GDL:RPM:rpm

CC: Fred Dunham

LOUISIANA NATURAL HERITAGE PROGRAM SPECIAL ANIMALS

Scientific Name	Common Name	SRANK	GRANK	Scientific Name	Common Name	SRANK	GRANK
! NVERTEBRATES				**FISH CONT'**			ı
Dubiraphia parva	little riffle beetle	\$183	6163	Notropis potteri	chub shiner	83	65
Brachycercus flavus	yellow brachycercus mayfly	ŦS	3	Notropis sabinae	Sabine shiner	\$ \$	79
Leuctra szczytkoi	Schoolhouse Springs stonefly	S	6163	Notropis signipinnis	flagfin shiner	ઝ	65?
Alasmidonta marginata	elktoe (mussel)	SS	65	Notropis welaka	bluenose shiner	83	45
Ellipsaria lineolata	butterfly (mussel)	2S	75	Notropis whipplei	steelcolor shiner	2 5	65
Elliptio crassidens	elephant-ear (mussel)	\$253	75	Phenacobius mirabilis	suckermouth minnow	SS	59
Elliptio dilatata	spike (mussel)	S?	59	Carpiodes cyprinus	quillback	85	S
Fusconaia ebena	ebonyshell (mussel)	\$183	63	Carpiodes velifer	highfin carpsucker	\$253	6364
Lampsilis ornata	southern pocketbook (mussel)	\$12	61?	Cycleptus elongatus	blue sucker	25	S
Lasmigona complanata	white heelsplitter (mussel)	25	S	Moxostoma carinatum	river redhorse	25	3
Ligumia recta	black sandshell (mussel)	S?	S	Noturus flavus	stonecat	SA	S
Margaritifera hembeli	Louisiana pearlshell (mussel)	s1	19	Noturus munitus	frecklebelly madtom	83	63
Obovaria jacksoniana	southern hickorynut (mussel)	\$152	6162	Fundulus jenkinsi	saltmarsh topminnow	\$253	53
Obovaria unicolor	Alabama hickorynut (mussel)	\$183	6263	Fundulus euryzonus	broadstripe topminnow	25	62
Pleurobema cordatum	Ohio pigtoe (mussel)	S?	75	Ammocrypta asprella	crystal darter	83	S
Potamilus capax	fat pocketbook (mussel)	S?	15	Ammocrypta clara	western sand darter	S 2	53
H Potamilus inflatus	inflated heelsplitter (mušsel)	S	61	Etheostoma caeruleum	rainbow darter	83	65
l Potamilus laevissima	pink papershell (mussel)	S	S	Percina lenticula	freckled darter	85	62
Quadrula nodulata	wartyback (mussel)	\$183	63	Percina macrolepida	bigscale logperch	S1S2	35
Strophitus subvexus	southern creekmussel	s.	5	Percina uranidea	stargazing darter	SA	5
Strophitus undulatus	squawfoot (mussel)	25	છ	Percina sp 8	(from LA)	S;	G 3
******	•			**AMPHIBIANS**			
Acipenser fulvescens	lake sturgeon	S	63	Ambystoma tigrinum	eastern tiger salamander	S1	S
Acipenser oxyrhynchus	Atlantic sturgeon	S	63	Amphiuma means	two-toed amphiuma	25	S
Scaphirhynchus albus	pallid sturgeon	\$17	5	Eurycea cirrigera	southern two-lined salamander	\$37	652
Polyodon spathula	paddlefish	83	35	Hemidactylium scutatum	four-toed salamander	S1	65
Alosa alabamae	Alabama shad	\$283	75	Plethodon serratus	southern redback salamander	S1	S
Campostoma anomalum	central stoneroller	85	59	Plethodon websteri	Webster's salamander	SI	630
Ericymba buccata	silverjaw minnow	8384	65	Pseudotriton montanus	gul 🛊 coast mud salamander	st S	65
Hybopsis gelida	sturgeon chub	S	63	Pseudotriton ruber	southern red salamander	S	65
Hybopsis gracilis	flathead chub	SA	75	Pseudacris ornata	ofnate chorus frog	Ж	9
Hybopsis meeki	sicklefin chub	SA	25	Pseudacris streckeri	Strecker's chorus frog	S1	625
Notropis boops	bigeye shiner	25	65	Rana areolata sevosa	dusky crawfish frog	2 5	6412
Notropis camurus	bluntface shiner	23	53				
Notropis hubbsi	bluehead shiner	25	63	,			

Scientific Name	Common Name	SRANK	GRANK	Scientific Name	Common Name	SRANK	GRANK
REP11LES				**BIRDS cont'**	-		
Caretta caretta	loggerhead	S1	8	Elanoides forficatus	American Swallow-tailed Kite	S	65
Chelonia mydas	green turtle	NS	63	Elanus caeruleus	Black-shouldered Kite	S1	65
Eretmochelys imbricata	hawksbill	NS	637	Haliaeetus leucocephalus	Bald Eagle	83	63
Lepidochelys kempii	Kemp's ridley	S1	61	Accipiter cooperii	Cooper's Hawk (nesting)	S1	79
Macroclemys temminckii	alligator snapping turtle	\$3?	63?	Buteo platypterus	Broad-winged Hawk (nesting)	83	GS GS
Dermochelys coriacea	Leatherback	NS	63	Aquila chrysaetos	Golden Eagle	S1	79
Graptemys geographica	map turtle	2	S	Polyborus plancus	Crested Caracara	SI	65
Graptemys oculifera	ringed map turtle	8 5	62	Falco peregrinus	Peregrine Falcon	S 2	63
Graptemys pulchra	Alabama map turtle	83	643	Laterallus jamaicensis	Black Rail	\$25	6364
Malaclemys terrapin	diamond back terrapin	25	65	Grus canadensis	Sandhill Crane	S1	65
Terrapene ornata	ornate box turtle	25	S	Grus americana	Whooping Crane	HS.	61
Sternotherus minor	stripeneck musk turtle	S.	65	Charadrius alexandrinus	Snowy Plover	\$27	645
Gopherus polyphemus	gopher tortoise	S1	25	Charadrius melodus	Piping Plover	8 5	29
Irionyx muticus calvatua	Gulf Coast smooth softshell	S3	G5T4?	Haematopus palliatus	American Oystercatcher	S	65
Ophisaurus ventralis	eastern glass lizard	\$37	S	Numenius boreatis	Eskimo Curlew	X.	5
Eumeces septentrionalis	southern prairie skink	S	65	Sterna nilotica	Gull-billed Tern	S 5	65
Carphophis amoenus vermis	western worm snake	\$33	6515	Sterna caspia	Caspian Tern (nesting)	83	65
Coluber constrictor	tan racer	S	6517	Sterna antillarum	Least Tern	25	79
etheridgei				Sterna antillarum	Interior Least Tern	S	6412
H Farancia erytrogramma	rainbow snake	\$27	59	athalassos			
Lampropeltis calligaster	mole kingsnake	83	6517	Sterna fuscata	Sooty Tern	sı	S
rhombomaculata				Zenaida asiatica	White-winged Dove	83	S
Pituophis melanoleucus	pine snake	83	65	Columbina passerina	Common Ground-dove (nesting)	25	65
Pituophis melanoleucus	black pine snake	S1	6512	Crotophaga sulcirostris	Groove-billed Ani	83	65
lodingi				Asio flammeus	Short-eared Owl	S	S
Pituophis melanoleucus	Louisiana pine snake	83	6513	Picoides borealis	Red-cockaded Woodpecker	2 5	29
ruthveni				Campephilus principalis	Ivory-billed Woodpecker	HS.	5
Rhadinaea flavilata	pine woods snake	25	645	Empidonax traillii	Willow Flycatcher (nesting)	S1	9
Micrurus fulvius fulvius	eastern coral snake	83	651?	Eremophila alpestris	Horned Lark (nesting)	\$253	65
Crotalus adamanteus	eastern diamondback rattlesnake	S1	S	Sitta carolinensis	White-breasted Nuthatch	S3	65
				Vireo bellii	Bell's Vireo (nesting)	S1	65
BIRDS			•	Vireo gilvus	Warbling Vireo (nesting)	S	65
				Vermivora bachmanii	Bachman's Warbler	¥	3
Pelecanus erythrorhynchos	American White Pelican	83	63	Dendroica petechia	Yellow Warbler (nesting)	S	65
Pelecanus occidentalis	Brown Pelican	S1	GS	Helmitheros vermivorus	Worm eating Warbler (nesting)	S1	GŞ.
Egretta rufescens	Reddish Egret	25	75	Seiurus motacilla	Louisiana Waterthrush (nesting)	\$283	S
Plegadis falcinellus	Glossy Ibis	25	65	Aimophila aestivalis	Bachman's Sparrow (nesting)	\$33	53
Ajaia ajaja	Roseate Spoonbill	25	59	Ammodramus savannarum	Grasshopper Sparrow	\$3?	75
Cygnus buccinator	Trumpeter Swan	æ	75	Ammodramus henslowii	Henslow's Sparrow	SS	75
Anas rubripes	American Black Duck	8384	75	Sturnella neglecta	Western Meadowlark (nesting)	¿S	65
Pandion haliaetus	Osprey (nesting)	25	59				

Scientific Name	Cormon Name	SRANK	GRANK	
MAHMALS				
Sorex longirostris	southeastern shrew	\$25	59	
Lasionycteris noctivagans	silver-haired bat	S1	65	
Eptesicus fuscus	big brown bat	\$23	650	
Marmota monax	woodchuck	SA	65	
Perognathus hispidus	hispid pocket mouse	25	65	
Reithrodontomys humulis	eastern harvest mouse	\$324	65	
Mesoplodon densirostris	Blainville's beaked whale	NS	65	
Ziphius cavirostris	goose-beaked whale	S	67	
Physeter macrocephalus	sperm whate	S	29	
Kogia simus	dwarf sperm whale	NS	63	
Stenella plagiodon	Atlantic spotted dolphin	8384	63	
Stenella clymene	short-snouted spinner dolphin	SN	69	
Stenella coeruleoalba	striped dolphin	NS	63	
Delphinus delphis	saddle-backed dolphin	\$37	63	
Pseudorca crassidens	false killer whale	NS	65	
Globicephala macrorhynchus	short-finned pilot whale	NS	63	
Balaenoptera physalus	finback whale	NS.	29	
Balaenoptera borealis	sei whale	S	. 62	
Balaenoptera acutorostrata	little piked or minke whale	NS	53	
Balaenoptera musculus	blue whale	S	29	
Balaenoptera edeni	Bride's whale	NS.	67	
Canis rufus	red wolf	æ	3	
Ursus americanus	black bear	85	65	
Bassariscus astutus	ringtail	S3	65	
Mustela frenata	long-tailed weasel	85	S3	
Spilogale putorius	eastern spotted skunk	85	59	
Felis concolor coryi	Florida panther	æ	6411	
Trichechus manatus	manatee	VS	627	

.

•

Each element is assigned a single global rank; in addition, it receives a state rank for each state in which it occurs. State ranks within each state are assigned by the state Heritage program, and the rank for any particular element may vary considerably from state to state. Global ranking is done under the guidance of the national Science Department of The Nature Conservancy.

GLOBAL ELEMENT RANKS:

- G1 = Critically imperiled globally because of extreme rarity (5 or fewer occurrences or very few remaining individuals or acres) or because of some factor(s) making it especially vulnerable to extinction.
- G2 = Imperiled globally because of rarity (6 to 20 occurrences or few remaining individuals or acres) or because of some factor(s) making it very vulnerable to extinction throughout its range.
- G3 = Either very rare and local throughout its range or found locally (even abundantly at some of its locations) in a restricted range (e.g., a single western state, a physiographic region in the East) or because of other factors making it vulnerable to extinction throughout its range; in terms of occurrences, in the range of 21 to 100.
- G4 = Apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery.
- G5 = Demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery.
- GH = Of historical occurrence throughout its range, i.e., formerly part of the established biota, with the expectation that it may be rediscovered (e.g., Bachman's Warbler).
- GU = Possibly in peril range-wide but status uncertain; need more information. NOTE: This rank should be used sparingly. Whenever possible, assign the most likely rank and add a question mark (e.g., G2?) to express uncertainty, or use a range (e.g., G2G3) to delineate the limits (range) of uncertainty.
- GX = Believed to be extinct throughout range (e.g., Passenger Pigeon) with virtually no likelihood that it will be rediscovered.

STATE ELEMENT RANKS:

- S1 = Critically imperiled in state because of extreme rarity (5 or fewer occurrences or very few remaining individuals or acres) or because of some factor(s) making it especially vulnerable to extirpation from the state.
- S2 = Imperiled in state because of rarity (6 to 20 occurrences or few remaining individuals or acres) or because of some factor(s) making it very vulnerable to extirpation from the state.
- S3 = Rare or uncommon in state (on the order of 21 to 100 occurrences).
- S4 = Apparently secure in state, with many occurrences.
- \$5 = Demonstrably secure in state and essentially ineradicable under present conditions.
- SA = Accidental in state, including species (usually birds or butterflies)
 recorded once or twice or only at very great intervals, hundreds or even
 thousands of miles outside their usual range; a few of these species may
 even have bred on the one or two occasions they were recorded.
- SH = Of historical occurrence in the state but no recent records; may still exist. Upon verification of an extant occurrence, SH-ranked elements would typically receive an S1 rank. The SH rank is reserved for elements for which some effort has been made to relocate occurrences, rather than simply ranking all elements not known from verified extant occurrences with this rank.
- SU = Possibly in peril in state but status uncertain; need more information.

 NOTE: This rank is used infrequently, if the status of a species in the state is questionable a range of ranks (e.g., \$153) is used or a question mark is added to the rank cofsidered most appropriate (e.g., \$1?).
- SX = Apparently extirpated from state.

VERTEBRATES RECORDED FROM ORLEANS PARISH

FISH

SPOTTED GAR
LONGNOSE GAR
SHORTNOSE GAR
ALLIGATOR GAR
AMERICAN EEL
GIZZARD SHAD
THREADFIN SHAD
REDFIN PICKEREL
CHAIN PICKEREL
GOLDFISH
GOLDEN SHINER
RIVER CARPSUCKER

RIVER CARPSUCKER
CREEK CHUBSUCKER
LAKE CHUBSUCKER
SMALLMOUTH BUFFALO
BIGMOUTH BUFFALO
BLACK BUFFALO
SPOTTED SUCKER
BLACKTAIL REDHORSE
BLACK BULLHEAD
PIRATE PERCH

YELLOW BULLHEAD
CHANNEL CATFISH
FLATHEAD CATFISH
GOLDEN TOPMINNOW
SALTMARSH TOPMINNOW
BLACKSTRIPE TOPMINNOW
BLACKSPOTTED TOPMINNOW

MOSQUITOFISH SAILFIN MOLLY BROOK SILVERSIDE

FLIER

GREEN SUNFISH

WARMOUTH

ORANGESPOTTED SUNFISH

BLUEGILL

DOLLAR SUNFISH
LONGEAR SUNFISH
REDEAR SUNFISH
SPOTTED SUNFISH
BANTAM SUNFISH
SPOTTED BASS
LARGEMOUTH BASS
WHITE CRAPPIE

BLACK CRAPPIE

BANDED PYGMY SUNFISH

FRESHWATER DRUM

AMPHIBIANS

THREE-TOED AMPHIUMA DUSKY SALAMANDER DWARF SALAMANDER CENTRAL NEWT GULF COAST TOAD WOODHOUSE'S TOAD NORTHERN CRICKET FROG BIRD-VOICED TREEFROG COPE'S GRAY TREEFROG GREEN TREEFROG PIG FROG STRIPED CHORUS FROG EASTERN NARROWMOUTH TOAD BULLFROG GREEN FROG SOUTHERN LEOPARD FROG SQUIRREL TREEFROG GRAY TREEFROG

REPTILES

GREEN SEA TURTLE KEMP'S RIDLEY SEA TURTLE SNAPPING TURTLE ALLIGATOR SNAPPING TURTLE PAINTED TURTLE CHICKEN TURTLE MISSISSIPPI MAP TURTLE RIVER COOTER COOTER EASTERN BOX TURTLE EASTERN MUD TURTLE RAZORBACK MUSK TURTLE COMMON MUSK TURTLE OR STINKPOT SPINY SOFTSHELL AMERICAN ALLIGATOR EASTERN GLASS LIZARD

MEDITERRANEAN GECKO
REPTILES CONT'

GREEN ANOLE FIVE-LINED SKINK BROADHEAD SKINK GROUND SKINK

RACER

RINGNECK SNAKE

RAT SNAKE MUD SNAKE

EASTERN HOGNOSE SNAKE

COMMON KINGSNAKE

MILK SNAKE

GREEN WATER SNAKE

PLAINBELLY WATER SNAKE SOUTHERN WATER SNAKE DIAMONDBACK WATER SNAKE

ROUGH GREEN SNAKE GLOSSY CRAYFISH SNAKE NORTHERN BROWN SNAKE WESTERN RIBBON SNAKE COMMON GARTER SNAKE

COPPERHEAD COTTONMOUTH

CANEBRAKE RATTLESNAKE PIGMY RATTLESNAKE

BIRDS

COMMON LOON

PIED-BILLED GREBE

HORNED GREBE
EARED GREBE
WESTERN GREBE

AUDUBON'S SHEARWATER

MASKED BOOBY

AMERICAN WHITE PELICAN

BROWN PELICAN

DOUBLE-CRESTED CORMORANT

ANHINGA

AMERICAN BITTERN LEAST BITTERN GREAT BLUE HERON

GREAT EGRET

SNOWY EGRET

LITTLE BLUE HERON TRICOLORED HERON

REDDISH EGRET CATTLE EGRET

GREEN-BACKED HERON

BLACK-CROWNED NIGHT-HERON YELLOW-CROWNED NIGHT-HERON

WHITE IBIS GLOSSY IBIS

WHITE-FACED IBIS

WOOD STORK TUNDRA SWAN

GREATER WHITE-FRONTED GOOSE

SNOW GOOSE CANADA GOOSE WOOD DUCK

GREEN-WINGED TEAL AMERICAN BLACK DUCK

MOTTLED DUCK

MALLARD

NORTHERN PINTAIL
BLUE-WINGED TEAL
CINNAMON TEAL
NORTHERN SHOVELER

GADWALL

AMERICAN WIGEON

CANVASBACK REDHEAD

GREATER SCAUP LESSER SCAUP OLDSQUAW BLACK SCOTER SURF SCOTER

WHITE-WINGED SCOTER COMMON GOLDENEYE

BUFFLEHEAD

HOODED MERGANSER COMMON MERGANSER

RED-BREASTED MERGANSER

RUDDY DUCK
BLACK VULTURE
TURKEY VULTURE

OSPREY

AMERICAN SWALLOW-TAILED KITE

MISSISSIPPI KITE

BALD EAGLE

NORTHERN HARRIER SHARP-SHINNED HAWK

COOPER'S HAWK

RED-SHOULDERED HAWK BROAD-WINGED HAWK RED-TAILED HAWK **BIRDS CONT'**

ROUGH-LEGGED HAWK GOLDEN EAGLE

AMERICAN KESTREL

MERLIN

PEREGRINE FALCON

NORTHERN BOBWHITE

YELLOW RAIL BLACK RAIL

CLAPPER RAIL

KING RAIL

VIRGINIA RAIL

SORA

PURPLE GALLINULE

COMMON MOORHEN

AMERICAN COOT

BLACK-BELLIED PLOVER

LESSER GOLDEN-PLOVER

SEMIPALMATED PLOVER

PIPING PLOVER

KILLDEER

BLACK-NECKED STILT

AMERICAN AVOCET

GREATER YELLOWLEGS

LESSER YELLOWLEGS

SOLITARY SANDPIPER

WILLET

SPOTTED SANDPIPER

SANDERLING

WESTERN SANDPIPER

LEAST SANDPIPER

BAIRD'S SANDPIPER

PECTORAL SANDPIPER

DUNLIN

SHORT-BILLED DOWITCHER

LONG-BILLED DOWITCHER

COMMON SNIPE

AMERICAN WOODCOCK

LAUGHING GULL

FRANKLIN'S GULL

BONAPARTE'S GULL

RING-BILLED GULL

HERRING GULL

GULL-BILLED TERN

CASPIAN TERN

ROYAL TERN

SANDWICH TERN

FORSTER'S TERN

COMMON TERN

LEAST TERN

BLACK SKIMMER

ROCK DOVE

WHITE-WINGED DOVE

MOURNING DOVE

COMMON GROUND-DOVE

YELLOW-BILLED CUCKOO

GROOVE-BILLED ANI

COMMON BARN-OWL

EASTERN SCREECH-OWL

GREAT HORNED OWL

BURROWING OWL

BARRED OWL

LESSER NIGHTHAWK

COMMON NIGHTHAWK

CHUCK-WILL'S-WIDOW

WHIP-POOR-WILL

CHIMNEY SWIFT

BUFF-BELLIED HUMMINGBIRD

RUBY-THROATED HUMMINGBIRD

BLACK-CHINNED HUMMINGBIRD

RUFOUS HUMMINGBIRD

BELTED KINGFISHER

RED-HEADED WOODPECKER

RED-BELLIED WOODPECKER

YELLOW-BELLIED SAPSUCKER

DOWNY WOODPECKER

HAIRY WOODPECKER

NORTHERN FLICKER

PILEATED WOODPECKER

EASTERN WOOD-PEWEE

WILLOW FLYCATCHER

LEAST FLYCATCHER

EASTERN PHOEBE

VERMILION FLYCATCHER

ASH-THROATED FLYCATCHER

GREAT CRESTED FLYCATCHER

WESTERN KINGBIRD

EASTERN KINGBIRD

SCISSOR-TAILED FLYCATCHER

HORNED LARK

PURPLE MARTIN

TREE SWALLOW

NORTHERN ROUGH-WINGED SWALLOW

BARN SWALLOW

BLUE JAY

AMERICAN CROW

FISH CROW **BIRDS CONT'**

CAROLINA CHICKADEE TUFTED TITMOUSE RED-BREASTED NUTHATCH BROWN CREEPER CAROLINA WREN BEWICK'S WREN HOUSE WREN WINTER WREN SEDGE WREN MARSH WREN GOLDEN-CROWNED KINGLET

RUBY-CROWNED KINGLET BLUE-GRAY GNATCATCHER EASTERN BLUEBIRD GRAY-CHEEKED THRUSH SWAINSON'S THRUSH HERMIT THRUSH WOOD THRUSH AMERICAN ROBIN GRAY CATBIRD

NORTHERN MOCKINGBIRD

BROWN THRASHER WATER PIPIT SPRAGUE'S PIPIT CEDAR WAXWING LOGGERHEAD SHRIKE EUROPEAN STARLING WHITE-EYED VIREO SOLITARY VIREO

YELLOW-THROATED VIREO PHILADELPHIA VIREO RED-EYED VIREO BLUE-WINGED WARBLER

GOLDEN-WINGED WARBLER

TENNESSEE WARBLER ORANGE-CROWNED WARBLER

NORTHERN PARULA YELLOW WARBLER

CHESTNUT-SIDED WARBLER

MAGNOLIA WARBLER

YELLOW-RUMPED WARBLER

BLACK-THROATED GRAY WARBLER BLACK-THROATED GREEN WARBLER

YELLOW-THROATED WARBLER

PINE WARBLER PALM WARBLER BAY-BREASTED WARBLER BLACK-AND-WHITE WARBLER

AMERICAN REDSTART PROTHONOTARY WARBLER

OVENBIRD

NORTHERN WATERTHRUSH LOUISIANA WATERTHRUSH

KENTUCKY WARBLER COMMON YELLOWTHROAT HOODED WARBLER WILSON'S WARBLER CANADA WARBLER

YELLOW-BREASTED CHAT

SUMMER TANAGER SCARLET TANAGER WESTERN TANAGER NORTHERN CARDINAL

ROSE-BREASTED GROSBEAK BLACK-HEADED GROSBEAK

BLUE GROSBEAK INDIGO BUNTING PAINTED BUNTING

DICKCISSEL

RUFOUS-SIDED TOWHEE BACHMAN'S SPARROW AMERICAN TREE SPARROW CHIPPING SPARROW

CLAY-COLORED SPARROW FIELD SPARROW VESPER SPARROW SAVANNAH SPARROW GRASSHOPPER SPARROW HENSLOW'S SPARROW LE CONTE'S SPARROW SHARP-TAILED SPARROW

SEASIDE SPARROW FOX SPARROW SONG SPARROW LINCOLN'S SPARROW SWAMP SPARROW

WHITE-CROWNED SPARROW WHITE-THROATED SPARROW

HARRIS' SPARROW DARK-EYED JUNCO RED-WINGED BLACKBIRD EASTERN MEADOWLARK WETERN MEADOWLARK RUSTY BLACKBIRD BREWER'S BLACKBIRD

BOAT-TAILED GRACKLE **BIRDS CONT'**

COMMON GRACKLE
BROWN-HEADED COWBIRD
ORCHARD ORIOLE
NORTHERN ORIOLE
PURPLE FINCH
PINE SISKIN
AMERICAN GOLDFINCH
HOUSE SPARROW

MAMMALS

SOUTHEASTERN MYOTIS EASTERN PIPISTRELLE BIG BROWN BAT RED BAT SEMINOLE BAT NORTHERN YELLOW BAT EVENING BAT RAFINESQUE'S BIG-EARED BAT BRAZILIAN FREE TAIL BAT NINE-BANDED ARMADILLO EASTERN COTTONTAIL SWAMP RABBIT GRAY SQUIRREL FOX SQUIRREL MARSH RICE RAT FULVOUS HARVEST MOUSE WHITE-FOOTED MOUSE COTTON MOUSE HISPID COTTON RAT EASTERN WOODRAT MUSKRAT NUTRIA RACCOON MINK RIVER OTTER

WHITE-TAILED DEER